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ABSTRACT

The initial purpose of this literature search on Third World women in agriculture was to locate materials in the New York and Washington areas. However, the location of source materials became a project in and of itself, and gaining access to various collections no small feat. Some of the best material is what is called fugitive literature. Word of mouth remains the single best avenue to the location of resources. The collections accessed in this search are: the Rockefeller Foundation, the Ford Foundation, the Population Council, the Agricultural Development Council, the International Women's Tribune Center, the United Nations, the Agency for International Development/Office of Women in Development, and the International Center for Research on Women. Materials are divided according to content: overview; farm systems research; sexual division of labor, case studies; time allocation; project evaluation; services, extension, training, credit, cooperatives; land reform and resettlement schemes; and impact of development. (BZ)

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THIRD WORLD WOMEN IN AGRICULTURE

AN ANNOTATED BIBLIOGRAPHY

PREPARED BY

SHELLY KESSLER

JULY 1985

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THIRD WORLD WOMEN IN AGRICULTURE:

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Shelly Kessler

July 1985

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PREFACE

This bibliography was prepared by Shelly Kessler while a consultant to the National Council for Research on Women early in 1985. She is now on the staff of CARE as Deputy Director for Africa.

The Council is an independent association of established centers and organizations which provide institutional resources for research, policy analysis, and action programs of concern to women. The bibliography was commissioned by the Council as part of a broader effort to facilitate and promote research on women in development. Barbara Lewis of the Council staff provided editorial and other assistance in the final stages of the preparation of the manuscript. The project was funded by a grant from the Rockefeller Foundation.

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INTRODUCTION

The initial purpose of this literature search on Third World women in agriculture was to locate the various materials on the subject in the New York - Washington area. The collections were then to be given a preliminary evaluation and the best was to be culled. A basic "preferred" list was to be compiled and annotated. One that would, for anyone interested in the area, provide a strong core of critical information. The compilation of the bibliography would help in delineating current trends in the literature, trace its evolution and aid in characterizing the area, its current thought and gaps.

During this process another issue, of equal import, became apparent. The location of source materials became itself a project, and gaining access to various collections no small feat. Traditional means of doing a literature search were not applicable to this subject. No indices exist, nor abstracts of the major literature (although a few organizations such as Michigan State University do abstract the material they publish). Word of mouth substitutes for such tangible data bases and remains the single best avenue to the location of resources. Material was often found in personal collections. In only two instances was the material in any way catalogued. Quite a few bibliographies (annotated and unannotated) do exist, but these include only published material and do not indicate where the studies can be found. A large portion of the information, in fact some of the best material, is what is called fugitive literature, prepared for

conferences and in-house studies, and whose existence is nowhere recorded. Unfortunately, many of the bibliographies that exist are also non-published, in-house pieces. Other works found were in draft form with citation restriction. These materials have been cited in this work with the caveat that they are drafts.

The implications of this situation to new research in a small and fragmented field are staggering. Persons interested in the subjects and without appropriate "contacts" among those knowledgeable in the field, would be hard pressed to locate good source material. And without an accessible data base on Third World women the researcher could not be certain that the primary sources had in fact been located. It is quite possible that important authors do not appear in this small bibliography because their work is not easily available, their names did not come up in conversations and no data base exists that could inform me as to their existence.

Of equal import was the lack of both European and Third World authors in the collections. The few Third World authors found were, more often than not, now affiliated with a U.S. based organization, or with another American author. European authors were extremely scarce and those writing in a foreign language almost unnoted. This was especially relevant in regard to Latin America and Spanish language case studies. This study, because of its reliance on U.S. collections, has a notable lack of Latin American case studies.

Although women's resource centers exist throughout the world, including repositories in Addis Ababa, the Sudan, India, Nigeria and Mexico, to name but a few in the developing countries, there

is little exchange of information. Abstracts of papers would be of immeasurable assistance to the researcher, yet they do not exist on either an international or national level.

The collections accessed in this search are as follows:

IN NEW YORK:

The Rockefeller Foundation: A small non-catalogued private collection, limited in scope to subjects of interest to the Foundation.

The Ford Foundation: A separate library on women of the Third World. The material is catalogued in a basic manner by subject with a cross-referenced author file. Bibliographic annotations are not available in the catalogue. Access to the library is available with permission of Ford Foundation personnel. Individual private collections also exist. These are uncatalogued and access is selective. Many conference reports can be found in these private collections.

The Population Council: A small amount of material is incorporated into the main library under various headings such as Rural Women, Farmers, etc. However, the bulk of the collection is currently uncatalogued and maintained in a restricted area. This collection will be catalogued in the near future and available to those who obtain library-to-library permission to use the Population Council collection. Proof must be given that the material is not available at a public library. Many of the works in this uncatalogued area are conference papers and limited circulation case studies and are extremely useful. Other material can be found in private collections, uncatalogued and not easily accessible.

Agricultural Development Council: Small collection of papers mostly from the 1970's, uncatalogued but kept in labeled files. Collection is accessible but soon to be dismantled as organization will soon move from New York. It has been rarely used as few have known of its existence.

The International Women's Tribune Center: Unfortunately, during the time of this search the Tribune Center was in the process of moving and its collection in boxes, making a review of their literature impossible. The Tribune Center has a collection of 50,000-60,000 documents, about 2000 on Third World women in agriculture. The material collected is primarily training manuals, project documents, and conference papers. They make an effort to obtain material by Third World women about Third World women. Academic works are not sought. Recently the Tribune Center was given the collection of the TransCentury Foundation on women in development, when that organization lost its funding for maintaining its library. The collection is catalogued using the OECD micro-thesaurus, or at the minimum by number and usually by subject. There is no author or title access, although two librarians are available for help and know the collection well. The library is open by appointment, but is not heavily used, again because its existence is not well publicized.

United Nations and the UNDP: Both these organizations were contacted and both maintained that they have little or no available material on the subject that would be accessible to the general public.

IN WASHINGTON:

Agency for International Development/Office of Women in Development: The office maintains its own library. However, the collection is small, non-catalogued and filed by country rather than subject making it difficult to use. Literature not published by this office is not solicited but obtained as authors send them in. The library is open to any who request access.

International Center for Research on Women: The ICRW Resource Center maintains more than 7,500 published and unpublished papers, government documents, monographs, and U.N. publications. Each document is cross-referenced according to descriptors in an in-house classification system. Requests for documents are welcome but should be made as specific as possible; both the subject(s) and the country or region should be indicated. The Resource Center is open to the public for reference and reading. This center and the Population Council were the most valuable sources of information for this study.

Other collections do exist in Washington but are privately held. These, where accessible to me, were not investigated as it seemed that it would be beyond the scope of this survey.

Others:

Although there are other collections throughout the United States time did not allow an investigation of their resources. However, as information and abstracts were readily available from the Michigan State University collection these were included in the bibliography. Since 1981 Michigan State University has published 80 papers through its Women in Development Office. These works

are often commissioned for international and national conferences and selected by MSU for publication as relevant to women in development. Abstracts of the papers are available as are the papers themselves (for a fee).

BACKGROUND TO THE BIBLIOGRAPHY:

From the outset it became necessary to make limitations on this work. The theme Third World Women in Agriculture, even within the geographic constraints already noted, is far too broad and encompassing an area to cover adequately in the time allowed. I have therefore chosen certain areas of women in agriculture to focus on and have omitted many of the companion subjects, such as women and animal husbandry, women in forestry, and women in food processing and marketing. Although these issues are not covered at all, they are very much part of women in agriculture and should be included in any larger work on the subject. Women's role in nutrition and child rearing is only tangentially noted and only as it directly relates to agriculture. Other areas such as training, credit and cooperatives are noted and some representative works cited. Areas such as extension, land rights, and women's roles in commercial agriculture were actively sought but with limited success.

This is quite obviously a preliminary study, one that will undoubtedly raise more questions than supply solutions. It is in no way a definitive work. As noted previously there are undoubtedly important pieces of literature not cited as these were not found among the collections searched. No slight to any author was intended by omission of their work.

I have chosen to divide material into categories as follows:

1) A small selection of mainstream analyses of Farms Systems Research. This material gives a broad overview of some of the current concerns in agriculture. As it is not the focus of this work, it is merely representational of themes in the literature.

2) Articles and books that deal with the broader picture of Third World women in development and in agriculture specifically. Also included are works on the policy implications of research on women in agriculture and future needs in the research.

3) Research work--primarily case studies with a particular focus, i.e. regional, crop specific etc. The underlying theme is the sexual division of labor.

4) Case studies that highlight time allocation studies, decision making roles and control of resources.

5) Works regarding services available to women: training extension, credit and cooperatives.

6) Land and Women--land reform, resettlement schemes, legal access to land and land tenure as they relate to women.

7) The impact of technology and development programs on women.

8) Project design and evaluation with women as focus.

Works asterisked are those considered essential reading. These works represent what this researcher considered the best material found for these areas. They were chosen after considering whether:

1) the work contributed significantly to our understanding of rural women's lives,

2) they presented unique perspectives or ideas important to the subject,

3) their data added to the portrait of women's roles in production, special attention was given to statistical data on women's economic participation with a quantitative analysis of women's social and traditional positions,
4) the research had overall implication for policy makers and planners.

Upon looking through the bibliography it will become obvious that there is substantial cross-over among categories by the material. However, a primary category has been chosen at the discretion of the researcher as the one most importantly represented by the work. By dividing the material in this manner it is hoped that the gaps and the areas of weakness in the literature are more clearly delineated.

DISCUSSION:

It is clear that until now women have remained the "invisible farmers" of the Third World, and have remained invisible to researchers, policy makers, and program planners alike. The focus of women's economic role in developing countries is a relatively young field, dating back little more than fifteen years to Ester Boserup's (1970) seminal analysis of women's participation in the labor force in Africa, Asia and Latin America. . The field remains in many ways fluid and formative. The theoretical base, the methodological development, the analytic rigor remain variable and to many researchers considered to be in the mainstream of agricultural research, women in development remains a "soft" area.

It remains a field functioning on the fringes not embraced by those who do not want to be associated with a marginal area. This

undoubtedly accounts for the marked absence of male authors in the field. This marginalization might be accounted for by two factors: 1) the failure of early researchers to "make the case" for women's issues with strong, methodologically consistent and statistically sound studies; and 2) an ideological resistance to the acceptance of women's issues as vital both to research and to policy.

However, upon review of the current literature it is evident that more and more researchers are seriously looking at what it will take to bring issues into the mainstream. The approach seems to be taking the form of making the case strongly and articulately so as to wear down the ideological resistance. The case is being made by hammering home, time and time again the overwhelming supportive evidence that women have a substantive productive role in agriculture. By micro-level studies of work patterns, time allocation, and specific gender differentiated roles researchers are refuting macro-level country statistics and surveys on the number of women in agriculture, the hours they work and their economic responsibilities to the household. (Boulding, 1975; Buvinic, 1983; Deere, 1982)

The case must be made on a variety of levels. It is necessary to appeal 1) to researchers as being relevant and worthy of their study and time, 2) to policy makers as being vital to the success and vitality of their national plans and development programs, 3) to program designers as being integral to rural development schemes, and 4) to program implementers.

RESEARCHERS

As more researchers begin case studies that focus on women, there is increasing demand from the community to strengthen the data base and to formalize the methodology. The variable quality of some of the earlier works has served to deflect attention from the real focus--women's roles, and to allow the mainstream to dismiss the area as unimportant. Buvinic (1983), Ashby (1979), Germain (1980), Pala (1976), Spiro (1984) and Safilios-Rothschild (1983) are but a few of the authors who have given thought to what needs to be done in the research and how it needs to be done.

Heather Spiro's 1984 "Women in Agriculture in West Africa," is one of the works that outlines some of the major issues, and touches upon some of the absurdities that still dominate development thinking about women. Although her work focuses on West Africa it is applicable to women in development in general.

Women contribute substantial amounts of labor, capital and management toward the production of Africa's food. Estimates of this contribution range from 60 to 80 percent, although regional and cultural variations exist. Up to 33 percent of farm-managers south of the Sahara are women. What is more, women also do most household chores, such as collecting firewood and water, cooking, repairing and maintaining compounds, child care and marketing surplus garden crops (Office of Technology Assessment, 1984). Despite this development planners still refer to "integrating" women into rural development as if they were not a major actor already.

Spiro and Safilios-Rothschild maintain that this inability to see women as economic beings is primarily the result of planners' (mostly male) views about what is the proper role of women (often a Western model with no relevance to the Third World). Development programs for women have stressed their role as mothers, cooks and wives and have acted to reinforce the process of "housewivization" of women. As a result women have consistently been underestimated, undervalued and undercounted by all concerned.

As developers continue to ignore women's productive role they perpetuate a situation where:

(a) women's productivity does not match their labor input,

(b) productivity remains low because women receive little or no assistance from extension agents or programs offering technological improvement appropriate to their work,

(c) little focus is placed on food crops, the area of women's work and great emphasis is placed on export or cash crops--the male bastion, thereby widening the gap between male and female productivity and income.

National data bases in many countries of the developing world have been proven to grossly underestimate women's roles. Carmen Deere and Magdalena Leon de Leal (1980) proved this to be the case in Peru and Colombia, Gita Sen in India (1983), John Stem in Guatemala (1982) and Constantina Safilios-Rothschild in Africa (1982). Because women's work is primarily in the area of subsistence crops and usually unremunerated, it is essentially invisible. An inherent male bias tends to continuously discount female contribution. (Sicoli, 1980)

In order to attract new researchers to the field and to counteract male bias in the enumeration of the contribution of women, current studies must forego the inconsistencies that marred the validity of earlier works. What is said about women's roles must be backed up by strong empirical evidence. Given the paucity of current empirical data, especially in the Latin American and Middle Eastern regions, a concerted effort must be made to strengthen the macro-level data base while continuing to build upon information gathered by micro-level village studies.

This must be done on two levels. First steps must be taken to standardize the approach to case study analysis. Current emphasis on an interdisciplinary approach to women's productive roles and the ensuing interchange among the diverse disciplines of anthropology, sociology and economics is proving extremely useful in the development of a standardized methodology for collecting and analyzing data. It is important that new case studies include certain essentials to assure their value to the field. These might include:

1) an assumption to be tested,

2) background on case study area; physical, socio-economic and production characteristics, including cropping patterns and calendars and field maps where applicable,

3) data on socio-cultural patterns; responsibilities, expectations, prohibitions,

4) data on legal rights disaggregated by sex,

5) evaluation of base data that might exist; census information, social indicators,

6) gender differentiated data; time allocation surveys, decision making roles, etc.,

7) analysis of control and access to inputs and outputs; consumption/allocation patterns, access to credit/loans, access to new technologies, access to training and extension,

8) the separation of ideological overlay from empirical findings,

9) conclusions based on empirical findings, and retesting of original hypothesis,

10) policy implications of research and findings.

Secondly, case research must be focused on drawing an accurate profile of the role women play in agriculture. Constantina Safilios-Rothschild (1983) has compiled a list of issues, information on which is absolutely essential to the understanding of women's roles and productivity. These include:

1) agricultural labor force indicators,

2) indicators of access to land and livestock,

3) indicators of agricultural information and services,

4) access to education,

5) participation indicators.

Dixon (1982) and Fortmann (1981) both stress the need also to analyze:

6) the role of class, ethnic and religious grouping as well as marital and parental status.

Chaney adds:

7) access to inputs and credits,

8) mechanisms to foster organization of rural women.

While Pala (1976) underscores:

9) male migration,

10) participation of women in marketing and cooperative societies.

The need to gather this information has engendered a whole new set of research on women, that of "time budget studies." These trace the pattern of the women's and men's work day. "Time-budget studies can provide development planners with the most far reaching and complete baseline data to access needs and ascertain the impacts of efforts directed toward a largely unrecognized and underutilized resource in the development process--women." (Zeidenstein, S. "Learning about Rural Women," Studies in Family Planning, Vol. 10 11/12) An FAO study, "Time Allocation Survey, A Tool for Anthropologists, Economists and Nutritionists," (1983) presented the results of three time allocation surveys in Nepal, Ivory Coast and Central African Republic. The findings underscored the major role women play in food related economic activities. Women were found to work long hours in the household and in the fields. The demands on their time make both labor and time scarce resources, often limiting the ability of women to innovate in agriculture.

Along with time budgets there is growing interest in consumption/allocation patterns (Schultz, 1982), decision-making roles (Abbott, 1974) and intra-household relationships (Jones, Hardt, 1981). These areas are particularly relevant as they form a bridge to the current focus among agriculturalists, Farm Systems Research, and focus on issues usually overlooked, such as:

1) the diverse goals of different family members,

2) the influence of gender and age on the decision-making process of access to and use of productive resources,

3) transfers carried our between and within households in acquiring inputs of marketing produce, e.g. between household members and their kin groups or community associates,

4) the uneven distribution on different household members of the effects of technological change.

(Intra-Household Dynamics and Farming Systems: A Call for Case Studies, The Population Council, 1984)

By broadening the scope of the current research to focus not exclusively on women, but on issues that have relevance to women as well as men, and that pertain to productivity rather than equity, there is a greater possibility of drawing the mainstream agriculturalists to the study of women's roles. (This is not to say that there is no place for the equity argument, but that it should be tempered with the more practical elements.) The linkages begin to form in the study of Farms Systems Research and intra-household dynamics. Those linkages will be strengthened as researchers are able to draw attention to the process or task rather than the woman. This would mean increased focus on biological interventions or improvements in food crops or animal husbandry, i.e., attention to the process rather than to the woman. (Personal Communication Katharine McKee) For both researchers and policy planners there must be a perceived broad range benefit (in the ideal case the benefit would be gender neutral) whether it be to scientific knowledge or to the national economy. It is somewhat analogous to the case being made to the industrialized nations for continued support of the developing nations. The argument must be that it is in their self-interest to assist in the development of the Third World and not that it is

only a moral obligation. In this case the stress is on productivity and self-interest rather than on equity and gender issues and the implications must be that there will be negative consequences to the whole if these issues continued to be ignored.

PLANNERS AND PROJECTS:

Researchers are beginning the process of reviewing the past three decades of development programming in an effort to assess the impact of technological interventions and development schemes on the well-being of national populations. They are finding that when the contribution women make in production is not taken into consideration by development agencies the introduction of technological change and large-scale development projects may result in the destruction of the domestic economy and the impoverishment of families (Nash--no date). There is a growing realization that the household in the developing nations (and this varies by country and by class) may not operate as the neo-classical economic unit, wherein the benefits and burdens of technological change will be shared equally by all members (Agarwal, 1983). And that therefore a supposed improvement may have an overall negative impact.

In recent studies of the impact of High Yielding Varieties of rice in Bangladesh (Abdullah and Zeidenstein--no date) and in India (Kelkar, 1981) it was found that the gains expected by such modernization were offset by the adverse affects on women. The unwitting result was to intensify the gaps between the haves and have-nots, and between women and men. (Kelkar, 1981) Women are almost entirely excluded from access to new technologies and their

input on needs goes unsolicited. Extension agents and development planners seldom reach out to women, and they have few rights as relate to credit, resources or acquisition of land. As most technological innovations have focussed on cash and/or export crops, again it is women who are left behind, as their focus is on food crops. Often the result of innovation has been the increase of the work load for women, i.e. as mechanization has increased the amount of acreage cleared for planting, the male domain, there is more weeding to be done, the female domain.

Irrigation projects have also proven to have variable benefits for women. Stanbury (1984) in a study of a North Indian village irrigated since 1954, traces some of the far-reaching and unanticipated effects of irrigation on women. Women were found to be adversely affected on two levels: 1) in their roles as unpaid and paid agricultural laborers, and 2) in their household roles as procurers of fuel, water and food for the family. Several land resettlement schemes and development projects have been shown to have similar negative impacts on women. In some, this failure to consider women in the planning process has meant failure for the project.

The overall result of these findings is to call attention to a variety of variables involved in the acceptance of new technologies such as:

a) differences in household members' opportunity costs of acceptance of new crops and technologies (Callear, 1983)

b) socio-cultural constraints to new technologies (Ashby, 1979; Carter, 1976)

c) location specificity (Sen, 1983)

d) diversity of needs and goals (Due, 1984)

e) resources of the small farmer (Ashby, 1984)

PROJECT PLANNING AND EVALUATION:

Concurrent with increased research on the productive role of women and their impact on development, there is a need to focus on the best ways and means of incorporating women into strategic planning documents and development projects. How do mainstream agricultural planners become sensitized to the needs of a special target group, such as women? What are the most effective means of incorporating women into agricultural projects? How does one make certain that women are not merely represented on paper but in practice? And finally, how does one evaluate these efforts in their success at reaching their female audiences?

A recent addition to the literature on women in agriculture is a few excellent case study analyses of projects and their success in taking rural women into consideration. Alice Carloni focused on ten FAO agricultural projects, while Christine Gladwin and Kathleen Staudt analyzed U.S.A.I.D.'s women in development component to their programs. As stated, both organizations are committed to the betterment of women's lives in the developing nations. Yet, as both Carloni and Gladwin note, the internal bias (on all levels) against targeting women farmers often makes a mockery out of so-called women in development projects. Often the implementers are unwilling and/or untrained to carry out programs that deal with women. The women's "expert" is often isolated from the project team and subsequently ignored. Programs aimed

exclusively at women were often found hidden away in social welfare ministries rather than ministries of agriculture, where they were underfunded, poorly staffed and easily ignored. The more successful programs were those that were part of larger agricultural projects with an exclusive women's component, yet even some of those suffered from lack of commitment on the part of the implementers. (Carloni, 1983)

In an effort to systematize the process of project design and evaluation Sara McPhee (1982) sets out an evaluation checklist to use on development programs aimed at women. She first provides five checklist principles:

1) Sexual division of labor: Who will perform work introduced by project?

2) Female labor productivity: how can access to technology and leisure decrease women's workload while raising their potential for contribution?

3) Consumption patterns: how do economic incentives offered by the project match consumption patterns in the family; among women in the family?

4) Decision making in the household and in production unit: who disposes of income and for what?

5) Economic and political participation: do women who later perform or who profit from project's benefits, participate in the design and the directing of the project?

McPhee suggests that women 's issues must be examined in the context of the whole, and that all dimensions of the problem, technical, economic and social, must be examined prior, during and post project implementation.

POLICY IMPLICATIONS:

There is no doubt that policy makers still refuse to see women as economic beings. This bias is reinforced by the failure of census and world data to reflect women's productive activities. Because of this, women's potential to improve the economic prospects of the development world is ignored and program planners and project designers continue in their failure to incorporate women's needs into development programs.

There is no lack of policy recommendations in the literature on women in development. Almost all case studies end with a list of recommendations that range from research on food crops (Blumberg, 1979), to strengthening women's organizations (Chaney, 1980). Researchers have encouraged increased attention to extension and others focus on access to credit and inputs. Yet, if there seems to be an air of redundancy to these proposals it is often because so few have been acted upon in the last decade.

Why has the research on women had so little effect on policy makers? Adrienne Germain posited that more often than not research is done outside influential bodies and the findings of the former are rarely transmitted to policy makers.

Devaki Jain, Rekha Bezboruah and Preeta Law in "Institutional Support for Women's Development" (1984) study and dissect the problems encountered in the attempt to incorporate women into national planning policy. Jain, et al. take on the argument often used to counter demands for women's programs, i.e. that there is little equity in the development world for both men and women, and therefore a focus on women would be frivolous. The authors

contend that in a male dominated system the needs of women are bypassed and the value of women ignored. To prove to developers that the needs of women are vital in policy planning Jain argues that it is necessary to prove statistically the value of women, to the development process and to the success of development programs. Even with this evidence women must take part in the planning process at all levels to insure a focus on women. Here again the importance of time studies, decision-making roles, and study of sexually differentiated labor is stressed.

One of the small promising signs that indicate that policy makers may be beginning to acknowledge women's productive role is a study commissioned by the Ministry of Social Welfare of India that would provide the methodology by which the interests of women could be integrated into India's Five Year Plan. An intensive survey was undertaken to look at who benefits from development services and how they benefit. The implications of such data, if accepted by policy planners, would be extremely important to the status of women in policy planning. However, it must be noted that women are cited as a target group in a number of national planning documents throughout the developing world, and although the mere mention of women as a priority group is a good sign, to date policy planners, development planners, and agricultural researchers have not been overly attentive to the needs of women or the impact of their policies and programs on women.

CONCLUSION:

The preceding discussion merely highlights some of the many issues that are currently engaging researchers of the role of

women in food production throughout the world. Their relevance to the future of the developing countries is only beginning to be understood. It remains a new and struggling field with vast potential still untapped.

ACKNOWLEDGMENTS:

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PART I: OVERVIEW

Ahmad, Zubeida, and Loutfi, Martha F. Women Workers in Rural Development. ILO Geneva, Rural Employment Policies Branch, May 1982.

*Ashby, Jacqueline. New Models for Agricultural Research and Extension: The Need to Integrate Women. Washington, D.C.: Agency for International Development/ORT, 1979, 50p.

> Argues that new agricultural and research strategies need to explicitly encompass women as participants if objectives of increased agricultural productivity and of equity are to be attained. Reviews agricultural extension programs in three case studies: Kenya, Botswana and Tanzania. Concludes that there must be access to appropriate channels of information on agricultural systems for women.

Ay, Peter, and Nweke, Felix I. Women in Farm Production and Research. International Livestock Centres of Africa, May 1984, 12p. (Discussion material).

> Cites five areas where there is extensive need for greater research and information on women in farm production: 1) Labor force indicators; 2) Access to land and livestock; 3) Access to information and services; 4) Access to education; 5) Participation indicators.

*Beneria, Lourdes, and Sen, Gita. "Accumulation, Reproduction and Women's Role in Economic Development: Boserup Revisited." Signs: Journal of Women in Culture and Society 7:2 (1981): 279-298.

> Lourdes Beneria and Gita Sen evaluate E. Boserup's pioneering effort to provide an overview of women's role in economic development (E. Boserup, Women's Role in Economic Development, London: George Allen and Unwin, 1970). Her major contributions to the subject are summarized before the authors turn to their critique of Boserup's theoretical framework from a Marxist-feminist perspective. Her book is, they argue, short on theoretical premises but when they occur, they fall within a neoclassical economic framework. Boserup, for example, explains women's low pay in terms of employers' preferences although her excellent data would support an analysis in terms of the cost of reproduction of labor or in terms of a fragmented labor market. Her explanation of the marginalisation of women in the development process depends upon a technological determinist version of modernisation theory modified by reference to cultural prejudice against women, rather than an analysis of the process of capital accumulation. Her well-known correlation between female farming systems and the hoe and male farming systems and the plough does not take account of the process of land accumulation and the substitution of wives' labor by male and female wage-labor. Boserup's analysis focusses upon non-domestic production as the determinant itself to the roots of patriarchal relations in the

sphere of reproduction. From the latter perspective, the policy implications of Boserup's work for the improvement of the position of women in productive labor through, for example, better education are inadequate. Similar, population control programmes which have not addressed the extent of women's reproductive freedom, or lack of it, have failed. Since Boserup's seminal text, feminist analysis of class and gender relations in the development of capitalism have clarified these issues. [Annotation from: Studies on Women Abstracts. 1. General. 2.1]

Blumberg, Rae Lesser. Females, Farming and Food: Rural Development and Women's Participation in Agricultural Production Systems. San Diego: University of California, December 1979, 76p.

Eight recommendations for policy makers and planners: 1) increased attention to training, extension and credit for women; 2) research on appropriate technology for women's areas; 3) research and development on new improved food crops; 4) focus on entire agricultural/food system rather than on export sector alone; 5) participatory research on issues that affect small farmers; 6) more information of legal position of women in regard to land reform and resettlement schemes as well as impact on the status of women; 7) emphasis on income generation; 8) employment of professional, knowledgeable persons in women's issues.

*Boserup, Ester. Women's Role in Economic Development. New York: St. Martin's Press, 1970.

Seminal work on women's economic role. Although many of Boserup's conclusions have been refuted it remains an important reference work. It is a comprehensive analysis of women's participation in the labor force in Africa, Asia and Latin America under the rural, urban and traditional economic labor systems. The author presents a dynamic analysis of statistical comparisons among world regions and between sexes for a great many economic variables.

*Boulding, Elise. "Women, Bread and Babies: Directing Aid to Fifth World Farmers." International Women's Year Studies on Women paper no. 4, Colorado: University of Colorado, Insitute of Behavioral Science, Program of Research on General Social and Economic Dynamics, March 1975, 44p.

An overview of the fifth world--where women carry out their productive roles. Boulding builds the case for giving priority to women's issues. Noting some of the earliest time allocation material from the Economic Commission for Africa Report for Bukoba in Tanzania (U.N. 1974 a:9) Boulding states that it is estimated that men work 1,800 hours per year in agriculture and women work 2,600 hours. This totals 4,400 hours, of which 60 percent is women's work. Boulding concludes her argument with a series of program and policy recommendations that insist on the integration of women into national program planning and their presence on planning commissions. She also recommends looking at full range of needs for women including: legal, non-formal education, extension and training, technical assistance, credit, family support, and representation in local organizations.

Brandtzaeg, Brita. "The Role and Status of Women in Post Harvest Food Conservation." Food and Nutrition Bulletin v. 4, no. 1, n.d.

Thesis is that there is a systematic non-recognition of women in science and research, especially in the area of crop transformation into edible foods. Women are in a crucial position in regards to the social organization of food related activities. Their skills and knowledge in areas such as parboiling, fermentation, and sprouting may go unrecorded unless there is formal recognition of their role. Recommends further research into the following areas: division of labor, impact of technical transition of women, impact of income changes within the family. Posits that there is a negative effect between economic growth in monetary terms and children's nutritional level. When father or male of the family receives more money, it is not necessarily shared with women. Therefore economic growth which implies redistribution of income to the male may in the end be detrimental to the welfare of the family.

*Buvinic, Mayra; Lycette, Margaret; and McGreevey, William Paul, eds. Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press, 1983, 329p.

This volume contains articles prepared for a workshop on the economic condition of poor women in developing countries organized by the International Centre for Research on Women (ICRW) in 1978. Part 1 includes an introductory article by Buvinic arguing that a poverty-oriented approach to research on women translates women's issues into development policy issues and is therefore more likely to attract the interest of development planners. Part II contains case studies on four themes: women and work, women and welfare, women-headed households, and the measurement of women's poverty in the third world. The case studies as a whole confirm the accumulating evidence that poor women work longer hours than poor men, that men receive a higher return on their labor in both formal and informal sector employment and that women's choices are limited (occupational) despite their economic responsibilities. Several of the case studies are concerned with the problems of data and proposals concerning more appropriate statistical measures and methods of accounting. [Annotation taken from: Studies on Women Abstracts]

Buvinic, Mayra; and Youssef, Nadia; with Barbara Von Elm. Women-headed Households: The Ignored Factor in Development. Washington, D.C.: International Center for Research on Women, 1978.

Portrayal of women heads of household in developing countries as a special group among the poor deserving the full attention of policy makers interested in bettering the quality of life of the poorest of the poor. De facto women heads of families are often invisible statistically--they are women who because of marital dissolution, desertion, abandonment, or migration of spouse or male to other areas are placed in a situation where they are economically responsible for themselves and their children. Authors have used census data from 74 developing countries to create a composite portrait of female-headed households. In their analyses they look

at the typology of women-headed households, the socioeconomics of women-headed households and the policy implications

Chaney, Elsa M., and Lewis, Martha W. Women, Migration and the Decline of Smallholder Agriculture. Washington, D.C.: Agency for International Development/Office of Women in Development, 1980.

Looks at the importance of smallholder agriculture and food production for third world development. Believes there is a need to put greater emphasis on growing methods and varieties of crops for small holders with special emphasis on women's crops. Areas for research on the subject of women's crops include: 1) development of appropriate production, harvesting and processing machines; 2) design of nutritionally improved small agricultural systems; 3) assessing social and psychological contributions to health and stability of rural society provided by small holder farming systems; 4) describing and analyzing smallholder survival strategies. And in the area of women's contributions: 1) time studies; 2) modernizing strategies; 3) access to inputs and to credit; 4) mechanisms to foster organization of rural women; 5) training for extension agents for women. 6) And finally, the effects of male outmigration on food systems, women's work, women's food production efforts and cash earning possibilities.

*Deere, Carmen Diane. "Rural Women's Subsistence Production in the Capitalist Periphery." Review of Radical Political Economics no. 8, 1976.

Deere makes a strong, albeit radical argument to support her hypothesis that the division of labor by sex, based on the articulation of production, serves to lower the value of labor power for capital, enhancing the relative rate of surplus value for peripheral capital accumulation and that the division of labor by sex reflects a familial survival strategy. She focusses on one component of rural women's economic participation, subsistence agricultural production, to develop a theoretical framework for the analyses of rural women's contribution to capital accumulation. Empirical evidence is presented for Asia, Africa (Boserup and Van Allen), West Indies (Caufield), and Latin America.

*Dixon, Ruth B. "Mobilizing Women for Rural Employment in South Asia: Issues of Class, Caste and Patronage." Economic Development and Cultural Change v. 30, no. 2. Chicago: The University of Chicago Press, January 1982.

Considering current interest among policymakers in the integration of women in national development, the question of how to expand income-generating employment for poor rural women both within and outside the agricultural sector becomes increasingly salient. Dixon proposes to analyze major sources of solidarity and cleavage in agrarian communities in South America as a guide for policy makers. Specifically looks at the roles of castes and patronage systems (i.e. horizontal vs. vertical alliances).

Dixon, Ruth B., "Women in Agriculture: Counting the Labor Force in Developing Countries," Population and Development Review v. 8, no. 3 (September 1982): 539-566.

*Germain, Adrienne. Research on Women in Agriculture Production in the Third World. Presented at workshop "Women in Agricultural Production in Eastern and Southern Africa," Nairobi, April 1980, 7p.

In this review of her own collection of works on women in agricultural production, Germain looks at the state of the art and gaps therein and asks what have we learned. At the Macrolevel: increased understanding that macrolevel data seriously underestimates female labor more than male labor in studies, making generalizations difficult and village studies incomplete. At the Microlevel: new studies at village level are no longer strictly anthropological but looking at socio-economic factors as well. The use of time allocation data has dispelled the myth of women as dependent, but there is a need to collect total family data not just on women. More research needs to be done in Middle East, North Africa and Pakistan. On Project Evaluation: Longitudinal studies are too costly, access is difficult. Models: Cannot superimpose neoclassical economic theory or neo-marxist theory on the subject, notion of patriarchy transcends the other two. Effects on policy: Much if not most research done outside influential bodies. There is a need to forge links between research programs and policy and planning groups so that both can work more effectively.

Giele, Janet Zollinger, and Smock, Audrey Chapman. Women: Roles and Status in Eight Countries (Egypt, Bangladesh, Mexico, Ghana, Japan, France, United States, and Poland). New York: John Wiley and Sons, 1977.

Some interesting insights into women and work, the effects of various culture and traditions on women's work and the way it is viewed.

Institute of Social Studies. Integrating Interest of Women into a State Five Year Plan. New Delhi: Ministry of Social Welfare, Government of India, 1984.

Designed to provide methodology by which interests of women could be woven into national five year plans. The aim was to assess the current state plan of India as relates to women by an intensive field level household survey in order to gauge the utilization of development services by poorest households and specifically women and children.

International Center for Research on Women. The Productivity of Women in Developing Countries: Measurement Issues and Recommendations. Washington, D.C.: Agency for International Development/Office of Women in Development, April 1980, 42p.

Discusses the policy relevance of female employment and work patterns for development. Policy makers refuse to see women as economic beings, which is reinforced by the failure of census and world data to reflect women's production activities. Recent household surveys show economic activity rates 14 percent to 30 percent higher than corresponding rates in census. Measures of participation such as time use surveys, and aggregated preference functions allow planners a greater understanding of the economy and of women's role in its functioning.

Jahan, Rounaq, and Papanek, Hanna. Women and Development: Perspectives from South and Southeast Asia. Dacca: Bangladesh Institute of Law and International Affairs, 1979, 433p.

Publication is the outcome of a regional seminar on Women and Development organized by the Bangladesh Institute of Law and International Affairs in March 1977. Many of the contributors are Indian or Bangali. All discuss the means by which women and their interests can be integrated into the development process in ways that promote development while promoting the needs of women.

Jain, Devaki. "Development as if Women Mattered or Can Women Build a New Paradigm?" Lecture delivered at OECD/DAC Meeting, Paris, January 26, 1983.

*Jain, Devaki; Bezboruah, Rekha; and Law, Preeta. "Institutional Support for Women's Development." Working Draft, Chapter X. Sponsored by Women's Bureau, Ministry of Social Welfare, Government of India, New Delhi, October 1984.

A document for planners. Part I addresses the issue of justification for women-focussed investment and strategies in countries where entire populations are deprived and depressed and where there is inequality in dispersal of facilities and shortage of resources for the entire population. This is the challenge to researchers on women. More works needs to be done on the specification of roles, the differential impact of development programs and the allocation of responsibility. Later the work tackles the issue of the male and patriarchal perceptions of national planners and the effect of these biases on the planning process. Recommends that women take part in the planning process to insure due notice to women's programmes.

Lele, Uma. "Women and Structural Transformation." Rockefeller Foundation, n.d. (Not published).

A critical essay and review of literature related to women's issues. Notes that the early women in development literature was not incorporated into mainstream economic and development theory because of the strong normative judgments in early pieces and their descriptive nature. New research needs to be more aware of economic, political and social variables affecting women's role in development.

*Lewis, Barbara C., ed. Invisible Farmers: Women and the Crisis in Agriculture. Washington, D.C.: Agency for International Development/Office of Women in Development, April 1981.

A compilation of papers from the "World Conference on Agrarian Reform and Rural Development" held by the FAO in Rome 1979. Contributions by Rae Lesser Blumberg, Frances Hill, Jacqueline A. Ashby, Christina Jones, Constantina Safilios-Rothschild, Ruth Dixon, Kathleen Staudt and Marilyn Hoskins. All emphasize the invisibility of women in development as a result of inappropriate definitional categories, faulty methods of data collections, and incomplete analysis.

Mazumdar, Vina. Role of Research in Women's Development: A Case Study of the ICSSR Programme of Women Studies. "Workshop on Public Policy and Policy Analysis," Centre for Women's Development Studies, New Delhi, April 5-7, 1982.

Mbilinyi, Marjorie. Participatory Research on Problem of Women in Agricultural Production in West Bagamoyo. Prepared for workshop on "Women in Agricultural Production in Eastern and Southern Africa," Nairobi, Kenya, 1980.

Miralao, Virginia A. Some Guidelines for the Integration of Women in National Development Plans. Occasional Paper No. 2, Integration of Women in Development Programme, Asia and Pacific Development Centre, Kuala Lumpur, Malaysia, 1982, pp. 1-21.

Moir, Hazel. Economic Activities of Women in Rural Java: Are the Data Adequate?. Occasional Paper No. 20, Development Studies Centre, Australian National University, 1980.

Looks at the relative merit of macro and micro data in providing realistic information on the economic activities of women. Sees large scale surveys as presenting a simplified view of complex realities.

Monson, Jaimie, and Kalb, Marion. Women as Food Producers in Developing Countries. Los Angeles: UCLA African Studies Center, The African Studies Association and OEF International, 1985.

Papers from a two day conference in 1984 co-sponsored by UCLA African Studies Center and OEF International. Includes papers by: Jane Jaquette, Kathleen Cloud, Ruth Dixon, Sylvia White, Susanna Hecht, Kathleen Staudt and Nkeonye Nwankwo.

*Nash, June. "Women in Development: Dependency and Exploitation." Development and Change v. 8, no. 2 (The Hague: Institute of Social Studies, April 1977): 161-182.

Looks at broader social and political implication of economic change on women. The failure to set any market value on women's work in reproduction and maintenance of the labor force means that their contribution to production is consistently undervalued. In a well documented broad analysis which looks at such innovations as the Green Revolution, Nash concludes that the position of women has worsened despite development activities. Sees the need for study of the disaggregation of family income disbursements in order to gauge the differential impact of male v. female employment.

Nieves, Isabel. The Interface Between Poor Women's Nurturing Roles and Productive Responsibilities. International Center for Research on Women, prepared for the "Second Annual Women, Work and Public Policy Workshop," Women and International Development Group, Harvard Institute for International Development, April 16-17, 1982.

Looks at the real need in both research and development planning fields to recognize the articulation between poor women's nurturing

roles and productive responsibilities. 1) The economic performance of households in the lowest income brackets is directly related to the economic activities of women in these households, 2) the importance of women's production role increases with poverty, but the extent of their reproductive role does not diminish, 3) women often have both home production roles and market production roles and responsibilities, and the poorer the household the more burdensome these roles. By looking at these interfaces, development strategizers must formulate viable, original alternatives for poor working women.

Pala, Achola O. African Women in Rural Development: Research Trends and Priorities. Overseas Liaison Committee Paper No. 12, Washington, D.C.: American Council on Education, December 1976.

Uses a literature review of women in rural development to provide a rationale for further research in the field. Highlights the serious loss of potential brought about by neglecting women's role in agriculture and food production. Research priorities for the future: Access to land, labor allocation, time budgeting, decision-making in household, male migration, agricultural training, participation of women in marketing in cooperative societies, women's self-help groups, women in pastoral societies and marginal areas.

Pala, Achola O. Women and Development: An Overview of Kenya. Presented to the American Council on Education, Overseas Liaison Committee Seminar on "Women in Rural Development," Washington, D.C., April, 1976.

Pala, Achola, and Seidman, Ann. A Proposed Model of the Status of Women in Africa. 1976, 39p. (No citation)

Interesting historical study of women in the colonial/early development period. Concludes that for women to advance there must be a complete restructuring of the entire set of political-economic institutions in Africa. As long as rural development is stymied and urban wage opportunities are limited to men, women are likely to remain second class citizens. Policy suggestions at end seem over generalized but basic argument is well presented.

Papanek, Hanna. Women in Development and Women's Studies: Agenda for the Future. Michigan: Michigan State University, Working Papers on Women in International Development #55, May 1984.

The internationalization of women's studies, the development of research paradigms that make gender central to analyses of social change and the rethinking of development issues from a new perspective on women are all essential to meeting the challenges of the immediate future.

Presvelou, Clio, and Spijkers-Zwart, Saskia, eds. The Household, Women and Agricultural Development. Proceedings of a symposium organized by the Department of Home Economics, Agricultural University Wageningen, The Netherlands, January 1979.

Safilios-Rothschild, Constantina. The Persistence of Women's Invisibility in Agriculture: Theoretical and Policy Lessons from Lesotho and Sierra Leone. The Population Council, August 1982.

Safilios-Rothschild, Constantina. The Role of Women in Modernizing Agricultural Systems. Washington, D.C.: Agency for International Development/Office of Women in Development, May 1981, 30p.

*Safilios-Rothschild, Constantina. The State of Statistics on Women in Agriculture in the Third World. Prepared for the "Expert Consultation on Women in Food Production," Rome, Italy, 7-14 December 1983, FAO, 1983, 27 pp.

Existing methods of data collection and census survey techniques are inadequate to capture the full range of women's activities in rural production. Detailed micro-studies reveal a far greater participation than formal statistics. Safilios-Rothschild presents a list of the minimum information necessary to be able to obtain a profile of the role women play in agriculture as well as their needs and potential for policy and planning purposes. The list includes a) agricultural labor force indicators b) indicators of access to land and livestock c) indicators of access to agricultural information and services d) access to education e) participation indicators. The paper goes on to examine some available statistics in selected countries. Concludes that, in general, more information exists on women's role in agriculture in sub-Saharan Africa than about countries in other regions. The least accurate and least complete information is available for Latin America, North Africa and the Middle East. More disturbing is the fact that in many African countries where data is available, it is not being used by agricultural planners, underscoring the absolute need to bring this information to the attention of planners and policy makers so that they can target programs to the appropriate actors. Finally, it is vital to use data from micro-village studies in tandem with census and national survey data in order to provide a more complete, meaningful picture of women's work in agriculture as well as to highlight methodological shortcomings and perhaps methodological alternatives to enhance data collection on all levels.

Schultz, T. Paul. Women and Economics of the Family: Some Concepts and Issues. Conference papers of "Women Households and Human Capital Development in Low Income Countries", Rockefeller Foundation, July 1982.

Outlines the micro-economic approach to studying people as producers and consumers who are attached at various stages in their lifetimes to families and households. Argues case for more empirical study on consumption/allocation patterns within families and greater study of women's non-market production activities.

Sen, Gita, and Grown, Caren. Development, Crisis, and Alternative Visions: Third World Women's Perspectives. For Development Alternatives with Women for a New Era (DAWN), A.s Verbum, Norway, 1985, 111p.

An analysis of women's experiences with the development process as perceived by a network of third world women, including activists, researchers, and policy makers. Suggests alternative approaches.

*Sivard, Ruth Leger. Women, a World Survey. Washington, D.C.: World Priorities, January 1985.

A comprehensive summary of the situation of women throughout the world. The focus is on changes which have occurred since World War II. Information is provided on population, work, education, health and legal rights.

*Spiro, Heather. Women in Agriculture in West Africa, The Research Gaps. "Workshop on Women in Agriculture in West Africa", sponsored by International Livestock Center for Africa and the Ford Foundation, Ibadan, Nigeria, May 1984.

Begins by quoting the report of the Mid-Decade Conference in Copenhagen 1980, "review and appraisal of the economic and social situation of rural women...revealed that little or no positive improvement had taken place since the beginning of the decade" (UN 1980). Spiro queries, "How do you 'integrate' women into development if they are already integral players?" As long as most planners are male no progress will be made. Research in the area is troubled by lack of prior experience by the researchers, lack of a standard literature or methodology for collecting and analyzing this data. New structures and linkages have to be created if there is to be any progress.

Tinker, Irene. New Technologies for Food Chain Activities: The Imperative of Equity for Women. Washington, D.C.: Agency for International Development, 1979, 43p.

Strategies for meeting the current food crisis. Reviews impact of current development policies and new technologies on women's work.

Wright, Marcia. Technology and Women's Control over Production: Three Case Studies from East Central Africa and their Implications for Ester Boserup's Thesis about the Displacement of Women. Rockefeller Foundation, Workshop on "Women, Households and Human Capital Development in Low Income Countries," July 1982.

Joins in the growing criticism of Boserup's premises and empirical foundations to roundly reject the tendency to segregate production from reproduction.

*Youssef, Nadia, and Hetler, Carol. Rural Households Headed by Women: A Priority Issue for Policy Concern. Washington, D.C.: International Centre for Research on Women, Washington, D.C., May 1982.

Chapter Five concentrates on issues relating to agriculture and production. Deals with the relationship of women to land, the effects of agrarian reforms laws, labor shortages, discrimination in rural financial markets and the neglect of women in delivery of technical knowledge.

PART II: FARM SYSTEMS RESEARCH

Axinn, Nancy. "Family and the Farm System." The President's World University Series, No. 4, College Station, Texas: Texas A&M University, November 1982.

Berry, Sara. "Macropolicy Implications of Research on Rural Households and Farming Systems." 1984. (Not published).

> Paper argues that microlevel studies of African farmers, farming systems and rural households can contribute to macroeconomic arguments for policy reform. Suggests that if microstudies are to be useful one must look not only at production prices but also social organization and resource acquisition and allocation. Berry both critiques policies of African governments and offers remedies.

Collinson, M.P. Farming Systems Research in East Africa: The Experience of CIMMYT and the National Agricultural Research Service 1976-1981. Michigan: Michigan State University Development Papers, 1982.

> Details the CIMMYT's experience in institutionalizing Farms Systems Research in Eastern and Southern Africa and derives a number of lessons from the experience. This is a good clear step-by-step description of farm systems research.

Conklin, Frank S. Farm Systems Research/Extension as a Field Methodology in Third World Countries: Its Historical Origins, Current Functions and Suggestions for Improvement. For FSR Symposia, Kansas State University, November 1982.

> Emphasizes functions FSR methodology should embrace: 1) establish opportunity cost benchmarks; 2) establish research priorities; 3) continuous screening of technology. Stresses the need for greater economic analysis in FSR.

*Eicher, Carl K. "Facing Up to Africa's Food Crisis." Foreign Affairs v. 61, no. 1 (Fall 1982): 154 - 174.

> Important analysis of the current African food crisis. Poses a series of key questions: What is the record of agrarian capitalism and socialism? Why did the Green Revolution by-pass Africa? What lessons have been learned from crash food production projects in the Sahel? Can foreign aid make a difference in the crisis? Eicher presents the issues and then food policy strategies to help meet the crisis.

Flora, Cornelia Butler. "Family and Food Production: Macro-Economic Trends and Farming Systems." The President's World University Series, No. 4, College Station, Texas: Texas A&M University, November 1982, pp. 23-34.

Flora, Cornelia Butler. "Intra-Household Dynamics in Farming Systems Research: The Basis of Whole Farm Monitoring of Farming Systems Research and Extension: A Position Paper." (Xerox copy, no citations)

Fresco, Louise. Comparing Anglophone and Francophone Approaches to Farming Systems Research and Extension. Presented at the Fourth Annual Conference on Farming Systems Research at Kansas State University, Manhattan Kansas, October 1984, Networking Paper No. 1, 31 p.

Fresco, Louise. Food Security and Women: Implications for Agricultural Research. O.R.S.T.O.M., Institut Francais de Recherche Pour le Developpement en Cooperation, International Workshop Paris, 14-19 January 1985, "Women's Role in Food Self-Sufficiency and Food Strategies," 12 p.

Ms. Fresco suggests that the implications for research of the current focus on gender roles in food production, processing, storage, preparation and marketing, have not been thoroughly examined. Too often modern technology interventions have been dismissed as detrimental to women and not examined for their potential impact on production. These two should not be exclusive. Women and the increase in their production are essential to future food security. Ms. Fresco discusses the need for change in the assumptions and attitudes of (male) researchers regarding the relevance of women's roles particularly in Farm Systems Research. Suggest the need to create data banks at regional and country levels to collect and coordinate existing information on women's roles in agriculture that are relevant to agricultural research.

Research Priorities: 1) shift from single crop research to a larger array of crops and technologies, 2) focus on labor saving technology especially improved crop varieties that do not increase labor, and 3) long term yield stability.

Jiggins, Janice. Farming Systems Research: New Name for Old Habits or the Key to Increasing Small Farm Productivity?. Ford Foundation, Nairobi. (No citation)

Questions whether FSR is merely a new slogan for established practice. Argues that if agricultural science and technology are to have true impact, FSR must be taken more seriously. It is not a laboratory science. It is a sequence, a system, but not a model. "Customer identification" has been very weak in previous farming systems; must do a little more market research on the proposed beneficiaries.

Jones, Christine. Bargaining Processes among Members of Agricultural Production Units in North Cameroon. 33p. (No citation)

Kerven, Carol. The Impact of Wage Labor and Migration on Livestock and Crop Production in African Farming Systems. (No citation)

Lele, Uma. "Rural Africa: Modernization, Equity, and Long Term Development." Science 6 February 1981, Washington, D.C.: American Association for the Advancement of Science, pp. 547 - 553.

Lele critiques African national policies, attitudes, and investment priorities towards smallholder agriculture that explain the poor performance of the agricultural and rural sectors in many African

countries. The prospects for changing the situation are considerable if national governments place their priority on developing the rural subsistence sector and international donors reconsider and reprioritise their roles and programs in Africa.

Lightfoot, Clive. Agronomic Techniques for the "Diagnosis" of Farmer's Problems. Botswana Notes and Records, Vol. 14, February 1984.

Low, Allen. Agricultural Development in Southern Africa--A Household Economics Perspective. Abstract and chapter 1 of thesis, 1984.

Sees stagnation of indigenous agriculture as being related to the way in which subsistence farm-households and their traditional social structures interact with an expanding modern market sector. Has a series of interesting tables on Rural Household Income Distribution by Income Source in Lesotho, Demographic Differentiation and Farm-Household Level Analysis in South Africa.

"Mainstream Agricultural Development Research Disaggregated by Sex: The Example of ICRISAT's Village Level Studies." Women and Food Information Network, March 1983.

Since 1975 ICRISAT has conducted 6 village level studies in India looking at farming systems and potential effect of change. In studies discovered that female agricultural laborers number greater than 20% figure previously cited for Asia. New agricultural technology often displaces women with no alternative employment and male wages are as high as 80% higher than women's.

Norman, D.W., and Baker, D.C. Components of FSR, FSR Credibility and Experiences in Botswana. (Xerox copy, no citation)

Excellent overview of FSR. Describes in detail the four stages of FSR: 1) Descriptive, 2) Diagnostic, 3) Design Testing, and 4) Dissemination Stage. FSR emphasis is on increasing overall productivity of the farming system (a new engine of development), developing and disseminating improved technologies and more relevant policies and support systems. FSR is a "bottom-up orientation" that will suit recommendations to local conditions. On farm research is done in collaboration with farmer while longer term technical problems are fed up to the experiment stations.

Norman, David; Pryor, David; and Gibbs, Christopher. Technical Change and the Small Farmer in Hausaland Northern Nigeria. African Rural Economy Program #21, 1979.

Organization of African Unity. Lagos Plan of Action for Economic Development of Africa, 1980-2000. 1981.

Far reaching regional approach based on collective self-reliance. Does specifically speak of women in Chapter XII with the caveat that women should not be marginal or separate from the overall development program but does not offer specific policy proposals other than request for extension and training efforts to focus on rural youth and women.

*Peters, Pauline E. Household Management in Botswana: Cattle Crops and Wage Labor. 32 p. (unpublished 1985)

Asserts that evidence drawn from research in Botswana raises questions about analytical distinctions made by FSR, especially the use of the term "farm household." Inter-household relations and intra-household strategies in Botswana are found to be the determining factors in patterns of diversified income. Peters argues that farming households are not discrete entities but part of larger or supra-household networks that both sustain and restrict them. Peters also argues that the place of gender in FSR, specifically the role of women is misunderstood. Rather than the sexual division of labor Peters stresses the interdependence in farming between men and women and the lack of understanding of these dynamics. Peters concludes with a series of recommendations for new approaches to Farm Systems Research using the data collected from Botswana to support her analyses.

Rosenzweig, Mark R. "Neoclassical Theory and the Optimizing Peasant: An Econometric Analysis of Market Family Labor Supply in a Developing Country." The Quarterly Journal of Economics, February 1980.

Rigorous empirical examination of models describing household labor supply behavior in context and rural labor markets in developing countries. Posits that development models assume exogenously fixed rural wage rates--insists that one must instead look at microfoundations of microdevelopment models.

Ryan, James G. and R.D. Ghodake. Labor Market Behavior in Rural Villages in South India: Effects of Season, Sex and Socio-Economic Status. India: ICRISAT, August 1980.

Study of labor market behavior of a sample of 240 labor and cultivator households in six semi-arid tropical villages in South India. Interesting small studies with some surprise results challenge some of the assumptions of female wage/and own farm labor. Found high proportions of female labor use on agricultural land far exceeds 20% figure cited for Asia by Boserup (1970). Found that in villages sampled women and men have an equal role in agricultural labor force, but women are less likely to get daily wage employment.

*Salinger, B. Lynn. The Effect of Asymmetrical Access to Resources on Farm Production: An Analysis of Farming Systems in the Diamare, North Cameroon "Paradigmic Constraints in Farming Systems Research". Doctoral dissertation, March 5, 1984, 14p. Introduction Draft (No citation)

Reviews assumptions about households as locus of decision-making. Sees gap between farm systems research and actual analysis of systems. Stresses that rural inequity should be noted and not myth of communality. Asymmetrical patterns of access to factors of production skews the technical efficiency of certain farmers, allowing political elites to control imperfect factor market results.

Weekes-Vagliani, W. Toward an Analytical Framework: Women, Food, Self-Sufficiency and Food Strategies. O.R.S.T.O.M., Institut Francais de Recherche Pour le Developpement en Cooperation, International Workshop Paris, 14-19 January 1985, "Women's Role in Food Self-Sufficiency and Food Strategies." 12 p.

Purpose is to raise ideas for discussion on how what women do on a micro-level is related to the macro food policy level. Issues discussed: 1) The importance of increasing productivity and who will actually do this. Men and women may have different preferences as to what, how and for whom to produce, that are not only related to food provisioning. 2) The variables that affect household and farm division of labor, including; size of landholdings and their distribution, market orientation of agricultural production, relative attractiveness of urban opportunities, the sexual composition of the agricultural labor force, the crops cultivated, and women's time allocation including seasonability aspect. Weekes-Vagliani suggests sampling regions within the countries to identify characteristics of actors in relation to the crops they are producing and how they relate to national food policies. This will in turn highlight implications for governments whose food strategies are gender-insensitive.

PART III: SEXUAL DIVISION OF LABOR, CASE STUDIES

Adekanye, Tomilayo O. The Ownership of Agricultural Products: Some Considerations for Integrating Women into Rural Development in Africa. ILCA Workshop, May 1984, 15 p.

Adekanye, Tomilayo O. Women in Agriculture in Nigeria. Addis Ababa, 1981, 43p.

> Data on 600 women in three areas of Oyo state in Nigeria is used to look at differences in socio-economic activities. Interesting survey of women's perception of self and their role. Main policy implication from analysis is that employment, education and income strategies need to be devised in order to enhance the contribution of women to agriculture and rural development in Nigeria and for their own personal fulfillment.

Ancheta, Rufina R. The Filipino Woman in Rice Farming. Occasional Paper #4, NFE/WID Exchange-Asia, University of Philippines at Los Banos, March 1982.

> Small study on women in the Philippines using data from the national demographic survey. Presents basic information on women in the agricultural sector, amount of time used by women in rice farming, contributions to family income and decision-making role in the family.

Antrobus, Peggy. Assessment of Education and Action Programmes for Rural Women: Report on the Windward Islands. FAO Consultation, Rome, March 1981, 23p.

> So little information exists on this subject that paper is primarily recommendations for needed research, programs and policy. Antrobus notes need for data and documentation on women's roles, programs to provide tools and training for women, a review of current legislation regarding women, recruitment and training of women and other programs that would deal with the broad range of women's issues and problems.

Ashraf, Malik. Notes on the Role of Rural Pakistani Women in Farming in the Northwest Frontier Province. 7p. (No citation)

Bagchi, Deipica. Female Roles in Agricultural Modernization: An Indian Case Study. Michigan: Michigan State University, Working Papers on Women in International Development #10, July 1982.

> The United Nations declaration in the mid-70's of an International Women's Decade focused attention on the need to integrate women into economic development. Increasing awareness of the adverse effects of economic development on female populations necessitates more comparative studies of female participation patterns in rural economies under varying regional-cultural frameworks. This study is

one answer to that call. Based on extensive field work conducted in three different crop regions along the culturally disparate border areas of Madhya Pradesh, India, the study revealed (1) a high degree of female participation in agricultural production and decision-making, (2) a gradual elimination of female roles in the wake of mechanization, and finally, (3) a cognizable level of indifference in governmental services and prospective plans for integrating female roles into the developmental effort. [Michigan State University Abstract]

Brinswanger, Hans P., and Shetly, S.V.R. Economic Aspects of Weed Control in Semi-Arid Tropical Areas of India. Occasional Paper 13, India: ICRISAT, March 1977, 31p.

Bukh, Jette. The Village Women in Ghana. Uppsalla: Scandinavian Institute of African Studies, 1979.

Burfisher, Mary E., and Horenstein, Nadine R. Sex Roles in the Nigerian Tiv Farm Household. Connecticut: Kumarian Press, 1985, 62p.

*Burton, Michael L., and White, Douglas R. "Sexual Division of Labor in Agriculture." American Anthropologist, v. 86, no. 3, September 1984, 18p.

Burton begins by reviewing the literature of research on the sexual division of labor, looking for correlations in the division of labor. He develops a cultural ecological theory of sexual division of labor. Five variables affecting the sexual division of labor: 1) Population pressure 2) Seasonal pressure 3) Presence of the plow 4) Dependency on domesticated animals and 5) Cereal production. Finds that the theory replicates well across several regions. He found that the number of dry months and the use of domesticated animals were the most powerful predictors of female agricultural contributions while population density has only weak effects (a major modification of Boserup's theory) and that female agricultural contributions decline with agricultural intensification. Suggests that when analyzing the female role in agriculture one must differentiate by crop and often by animal.

Burton, Michael; White, Douglas R.; and Dow, Malcolm M. Sexual Division of Labor in Old World Agriculture, Michigan: Michigan State University, Working Papers on Women in International Development #05, April 1982.

In this paper the authors formulate and test a cultural ecological model to explain cross-societal variations in female contributions to agricultural subsistence. The model includes two kinds of variables--labor allocation constraints and technological factors. The authors assume that the male contribution to agriculture increases with societal complexity primarily because (a) women's labor gets redirected to other tasks such as the care of domesticated animals, and (b) men's labor is pulled into agriculture by the increase in the total daily agricultural workload.

The importance of domesticated animals to subsistence agriculture emerges as the single most powerful predictor of male participation in agriculture. Population pressure and a long dry season also act

to increase the relative contribution of men to agricultural subsistence. Both increase the amount of work to be done per unit of land and time and, hence increase the amount of agricultural work that men must do. The plow also acts to decrease female participation in agricultural subsistence, presumably through its effect on land ownership and the form of marriage, but it does not have the strength of relationship to female subsistence participation that often has been claimed for it. [Michigan State University Abstract]

Cain, Mead; Kharham, Syeda Rokeya; and Nahar, Shamsun. Class, Patriarchy and the Structure of Women's Work in Rural Bangladesh. New York: The Population Council, Center for Policy Studies, Working Paper No. 43, May 1979, 48p.

Begins with the premise that women's work in Bangladesh has been poorly documented and researched. Presents an analysis of women's work using time allocation information from 114 households. Work is analyzed in the context of male dominance (patriarchy). The authors document division of labor by sex, seasonal variation of labor use and the structure of the female labor market, and use this information to make policy recommendations on government programs to mechanize rice processing, and their impact on women.

Callear, Diana. Women and Coarse Grain Production in Africa. For "Expert Consultation on Women in Food Production," FAO, Rome, December 1983, 15p.

Argues that within households opportunity costs of acceptance of new crops and technologies are usually different between men and women. Anything that might undermine the women's ability to provide family food is undesirable. Contains long description of coarse grain requirements in production.

*Carter, Jeanette E. We Don't Sell Rice: The Dynamics of Food Production and Allocation in Northwestern Liberia. Presented at African Studies Association Meeting, Boston, Mass., November 1976.

Carter explores some of the socio-cultural factors which influence reluctance of farmers in one area of Liberia to sell rice. Author focuses on social units of production and distribution of crops and the strategies of individuals attempting to guarantee their security and maximize cash incomes. This is an early study that is one of the first to recommend the need to look at social organization along with the allocation of land, labor and capital and marketing and pricing schemes. Concludes that one should not assume that households are unitary units of production and allocation.

Chandratat, Mrs. Supranee. The Role of Thai Women in Rice Production. Presented at the Conference "Women in Rice Farming Systems," International Rice Research Institute, Manila, September 1983, 13p.

Short country survey of the role rural women plan in the sequence of rice production operations.

Chaney, Elsa M. Scenarios of Hunger in the Caribbean: Migration, Decline of Smallholder Agriculture and the Feminization of Farming. Michigan: Michigan State University, Working Papers on Women in International Development #18, March 1983.

> Food deficits, malnutrition and associated nutrition-deficiency diseases in the Caribbean are topics full of uncertainties for policymakers. Many studies have been carried out over the years on the nutritional status of specific population groups, based on vital statistics, clinical data, and dietary and anthropometric surveys. This paper suggests alternative ways to advance our knowledge of why people in the region are undernourished and where planners might direct their energies in seeking solutions. Rather than focusing on nutrition surveys, the paper sketches a series of interlocked "scenarios" that analyze the larger systems generating hungry people: in particular, outmigration from rural areas, the decline of smallholder agriculture, and the feminization of farming. [Michigan State University Abstract]

Cheater, Angela. "Women and their Participation in Commercial Agricultural Production: The Case of Medium-Scale Freehold in Zimbabwe." Development and Change, #12, July 1981.

> Using her fieldwork done in 1973-1974 that looked at polygynous relationships and their effects on production, Cheater suggests that commercial agricultural production may rest, not simply on capitalism, but on what initially may appear to be rather strange mixtures of capitalist forces of production and peasant relations of production, supplemented by a wide variety of old and new methods of recruiting labor when it is needed at specific points during the agricultural cycle. This in turn leads toward the increasing appropriation of surplus labor needs from wives and dependent close kin. Includes tables on the relationship of female managers to male owners of farms in Msengezi.

*Cloud, Kathleen. Sex Roles in Food Production and Food Distribution Systems in the Sahel. Prepared for USAID Bureau for Africa, AFR/SFWA Project, Washington, D.C., December 1977, 19p.

> Examined French River Basin resettlement scheme in the White and Red Volta Valleys in Upper Volta. Case study to identify roles and responsibilities of women within Sahelian food production and distribution systems. Gives breakdown of sex roles in food production among sedentary farmers and food production practices. A short look at women's programs is also presented.

*Deere, Carmen Diana, and Leon de Leal, Magdalena. Rural Employment Policy Research Programme: Women in Agriculture: Peasant Production and Proletarianization in Three Andean Regions. World Employment Programme Research Working Paper, November 1980.

> Analyses data collected at national level in Colombia and at State level (Cajamarca) in Peru. Focuses on the articulation between rural women's work in agricultural production on peasant holdings and the proletarianization of small farm households, leading to

women's wage employment. In sharp contrast to census data, this study provides clear evidence that women participate actively not only in field work and animal raising but also in processing and marketing of agricultural and animal products and are also engaged in seasonal labor on plantations, haciendas and modern commercial farms. Highlights the problem of gross underenumeration of women's work. Has extensive data to back up this proposition, and to illustrate the extent and heterogeneity of sexual division of labor among the three regions. In the process finds that Boserup's propositions concerning the relationship between agricultural work and the existence of a rural proletariat hold only for the middle and rich strata of the peasantry. As society grows more capitalist, women have less of a decision-making role.

Deere, Carmen Diane, and Leon de Leal, Magdalena. Women in Andean Agriculture: Peasant Production and Rural Wage Employment in Columbia and Peru. Geneva: International Labor Organization, 1982, 172p.

Seeks to understand varying participation of women in agriculture in terms of uneven development of capitalism between regions and in terms of social differentiation of the peasantry within regions.

Dey, Jennifer. Rice Farming Systems: Case Studies of Current Developments and Future Alternatives in Upland Rice and Inland Swamp Rice. "Expert Consultation on Women in Food Production," Rome, Italy, December 1983, FAO August 1983, 18p.

*Dey, Jennifer. Women in Rice Farming Systems with a Focus on Africa. "Expert Consultation on Women in Food Production," Rome, Italy, December 1983, FAO August 1983, 22p.

Focuses on women's role in rice production, post-harvest work and marketing. Stresses the need to view rice farming systems in larger context of the environment.

Dey, Jennifer. "Women and Rice in the Gambia," Development Planning in the Gambia, World Development vol. 10, no. 5, 1982.

Engle, Patricia Lee. The Intersecting Need of Working Women and their Young Children. A Report to the Ford Foundation, August 1980.

Focus on Latin America

Fortmann, Louise. Women and Tanzanian Development. Tanzania: Economic Research Bureau, University of Dar Es Salaam, 1978.

Challenges the image of women as ignorant, passive, traditional cultivators. Shows women as those making decisions and innovating. Although women have primary agricultural role their secondary role in society allows them little access to resources and innovations.

Fortmann, Louise. Women's Involvement in High Risk Arable Agriculture: The Botswana Case. Data collected as part of the Ministry of Agriculture, Water Points Survey, funded in part by USAID-Cornell University Cooperative Agreement, USAID/WID, Washington, D.C., April 1980.

Includes some interesting data on women in the Eastern Communal areas of Botswana. Looks at number of female-headed households, female- headed households with cattle, as well as percentage of acreage owned by women, percentage of plowed landed and percentage of female -headed households using tractors.

Gulati, Leela. "Profile of a Female Agricultural Labourer," Economic and Political Weekly. Vol. XIII, No. 12, Review of Agriculture, March 25, 1978, pp. A27-35.

Guyer, Jane. Women's Farming and the Food Supply of Yaounde: History and Prospects. O.R.S.T.O.M., Institut Francais de Recherche Pour le Developpement en Cooperation, International Workshop Paris, 14-19 January, "Women's Role in Food Self-Sufficiency and Food Strategies." 15 p.

Halim, Abdul, and McCarthy, Florence E. Women Laborers in Rice Producing Villages of Bangladesh. September 1983. (Not for Quotation or Citation)

Small two month study of women during post harvest period.

Henn, Jeanne Koopman. "Feeding the Cities and Feeding the Peasants: What Role for Africa's Women Farmers?" World Development vol. 11, no. 12, 1983, pp. 1043-1055.

Illo, Jeanne Frances. Wives at Work: Patterns of Labour Force Participation in Two Rice Farming Villages in the Philippines. Manila: Development Academy of Philippines Metro Manila, 1983.

International Rice Research Institute. Report of "Women in Rice Farming Systems Conference," 26-30 September, 1983, Los Banos, Laguna, Manila.

Conference report with action-research suggestions for the role of CGIAR, IRRI and TAC.

Janelid, Ingrid. The Role of Women in Nigerian Agriculture. Rome, Italy: FAO May 1975.

*Jiggins, Janice. Female Headed Households among Subsistence Cultivators in the Central and Northern Provinces of Zambia. Presented to "Workshop on Women in Agricultural Production in Eastern and Southern Africa," April 1980, Ford Foundation, 46p.

Examines whether female-headed households are suffering the same problems experience by small-scale producers and subsistence cultivators or are facing more acute or special difficulties as a result of their social status. Conducted district analysis of female-headed households and found that female-headed households' farms tended to be smaller in size than male farms and that there were a marked lack of labor saving or enhancing aids. Concluded that there is increasing differentiation among cultivators at subsistence or semi-subsistence levels--creating a poor peasant stratum consisting mainly of dependent women.

Jones, Christine. The Effects of Intrahousehold Organization of Production and the Distribution of Revenue on the Participation of Irrigated Rice Cultivators in the Semry Rice Project. Cameroon: CRED and AID, 1982.

Kahn, Qaiser M. Household Composition, Sharecropping and Agricultural Productivity: Evidence from an Economy in Transition. Bowdoin College, 1984. (No citation)

> Studies nature of profit-maximizing decisions by agricultural households in countries where men and women have clearly defined sex roles to observe in economic activities. Recommends greater focus on women and the structure of agricultural households and constraints therein. Posits that if we allow for economic and social constraints, agricultural households, even in more traditional societies behave in rational utility-maximizing fashion.

Kahn, Qaiser; Dodoo, Sammuel; and Horton, Susan . Do Women Increase Agricultural Productivity? The Effect of Demographic Variables on Technology in an Economy in Transition. May 1984. (No Citation)

> Attempts to demonstrate that socio-religious constraints that limit spheres in which women may be economically active, don't restrict but enhance the extent of their contribution to agricultural productivity and economic development. Being restricted to the farm forces women to work more intensively.

*Kerven, Carol. National Migration Study Urban and Rural Female Headed Households Dependence on Agriculture. Botswana: Central Statistics Office, Ministry of Finance and Development Planning, Ministry of Agriculture, 1979, 65p.

> Reviews sources of information on female-headed households in Botswana's urban and rural areas. Examines degree households are dependent on agriculture and the nature of agricultural production. Concludes that female-headed households have more difficulty in agriculture than men, especially those with no husbands to bring in or send additional income, and those with no adult children. Finds that the ability of women to carry out work is dependent on age of household head, marital status, employment status, age of children and composition of household. However, women can and do carry out what is considered men's work. Ends with a series of interesting policy recommendations for focussing on the needs of female-headed households.

*Knudsen, Barbara and Yates, Barbara A. The Economic Role of Women in Small Scale Agriculture in the Eastern Caribbean: St. Lucia. For the Women and Development Unit, Extra-Mural Department, University of West Indies, Barbados, June 1981, 68p.

Kurian, Rachel. Women Workers in the Sri Lanka Plantation Sector: An Historical and Contemporary Analysis. Geneva: International Labor Office, Women, Work and Development Paper No. 5, 1982, p. 138.

> As there is little real information on women as agricultural wage earners this piece presents some interesting data. Portrays the

nature and condition of work by women on tea, rubber and coconut plantations in Sri Lanka. Finds that women earn lower wages than men, have inadequate access to child care facilities, little control over income and work extremely long hours. Makes specific policy recommendations for improvement of women wage earners' situation.

Lloyd, Cynthia B. "The Division of Labor Between the Sexes: A Review." In Sex, Discrimination and the Division of Labor, edited by Cynthia B. Lloyd, Columbia Studies in Economics No. 8, New York: Columbia University Press, 1975.

Presents a history of the division of labor in different farming systems.

Manda, D.R.B., and Kumwenda, A.S. Women in Rice Farming: The Malawi Experience. Country Report prepared for "Women in Rice Farming Systems Conference," 26-30 September 1983, International Rice Research Institute, Los Banos, Laguna, Philippines, 1983.

Highlights the issues of migration and its effects on women. "As more men than women in rural areas have tended to emigrate to urban areas, there has been an increased ratio of women to men living in rural areas working in agriculture." Women's role becoming more not less significant with time. Paper documents women's role in rice farming and considers issues of land acquisition for women vs. men, labor use of women farmers compared to that of men and the effects of rice technology particularly the introduction of transplanted irrigated crops vs. rainfed crops.

Manhande, Dr. Keshari L. The Women's Current Role in Rice Cultivation and the State of Technology Development in Nepal. Prepared for "Women in Rice Farming Systems Conference," 26-30 September 1983, International Rice Research Institute, Los Banos, Laguna, Philippines, 1983.

Martin, Franklin. Women's Role in Root and Tuber Crops Production. Prepared for "Expert Consultation on Women in Food Production," Rome, Italy, 1983.

*Mencher, Joan P. Landless Women Agricultural Labourers in India: Some Observations from Tamil Nadu, Kerala and West Bengal. International Rice Institute, Philippines, September 1983. (DRAFT)

Based on data collected by Dr. K. Saradamoni of the Indian Statistical Institute in New Delhi. As is stated in the title this is more an observation than an in-depth study, as the main study is not longitudinal but observational. Addresses impact of new technology on women's employment and how technology can help diversify income earning opportunities for women. Notes that to date impact of new technology has been primarily negative and suggests that alternative employment for women be introduced before labor-saving innovations are brought about in paddy cultivation.

*Mencher, Joan P., and Saradamoni, K. "Muddy Feet, Dirty Hands: Rice Production and Female Agricultural Labour." Economic and Political Weekly, December 1982, pp. 149-167.

Detailed data on involvement of women in production and processing of paddy rice. Fills in data gaps on women workers. Looks at six villages for 1) intravillage variability 2) different patterns of work and agricultural practices 3) wage rates of male and female workers. Used charts and day to day interviews as well as an observational notebook and intensive interviews to gather information. Includes interesting discussion of the problems involved in doing a case study: degree of empirical variability in statistics relating to conditions of employment, land reform, marital status, age, seasonability and availability of work.

*Moock, Peter R. "The Efficiency of Women as Farm Managers: Kenya." American Journal of Agricultural Economics, December 1976.

Excellent early study of possible differences between male and female farm managers in the possession of and means of acquiring technical information relevant to agricultural production of maize. Producers are said to differ in technical efficiency when they experience systematic differences in outputs from a given combination of inputs. Samples 152 maize farmers in Vihiga, Western Kenya. Found that 38 percent of division's farm were managed by females giving than greater decision-making responsibility than is generally the case. Concluded that the impact of schooling on output was greater for women than men and that women don't seem to benefit as men do from extension contact because of the male orientation.

Ngure, Elizabeth M. Food Strategies in Kenya: What Role for Women? O.R.S.T.O.M., Institut Francais de Recherche Pour le Developpement en Cooperation, International Workshop Paris, 14-19 January, "Women's Role in Food Self-Sufficiency and Food Strategies," 9 p.

Presents a short analysis of how women's roles and positions have been affected by past policy changes in Kenya and how they will be affected by future food strategies. Concludes that women are unlikely to benefit and may in fact be hurt by the current government's food strategy plan. Believes that overall condition of small farmers in general and women specifically, cannot be bettered without a comprehensive restructuring of the whole social relations of production and reproduction which lead to inequity.

Odie-Alie, Stella. Women in Agriculture: The Case of Guyana. Women in the Caribbean Project, prepared for Guyana Workshop held in Georgetown, Guyana, April 26, 1982, 160p.

Overholt, Catherine, et. al., eds. Gender Roles in Development Projects: A Case Book. Connecticut: Kumarian Press, 1985, 350p.

Palmer, Ingrid. The Impact of Male Out-Migration on Women in Farming. Connecticut: Kumarian Press, 1985, 75p.

Palmer, Ingrid. "Seasonability of Woman's Work: Patterns and Trends." Prepared for conference on "Seasonal Dimensions to Rural Poverty," Institute of Development Studies and Ross Institute of Tropical Hygiene, United Kingdom, not dated, 8p.

Pradhan, Bina. The Role of Women in Household Production Systems and Rice Farming (Nepal). Prepared for "Women in Rice Farming Systems Conference," 26-30 September 1983, International Rice Research Institute, Los Banos, Philippines, 1983, 32p. (DRAFT)

> Paper is extracted from some of the findings of the Centre for Economic Development and Administration Status of Women Field Studies in its look at women's role in household production systems. Concentrates on four points 1) time allocation patterns and decision-making processes 2) women in agriculture and rice farming systems 3) women's accessibility to inputs and institutional credit 4) effect of technicological inputs on women. Includes good data on gender specific spheres in village economy and sexual division of labor.

Pradhan, Bina. Work Patterns of Women in Food Production. Prepared for the FAO's "Expert Consultation on Women in Food Production," Rome, Italy, 1983.

*The Role of Women in Food Production With Particular Reference to Small Animals at Village Level. Rome, Italy: FAO, December 1983, 18p.

> Compiled on the basis of reports by Paula Gauch and A. Ben David. Study explores general features and differing purposes of women's small animal production activities, unfortunately data and analysis thereof is negligible.

Sajogyo, Ms. Pudjiwati. Women and Food Production, Processing and Marketing: An Indonesian Case. O.R.S.T.O.M., Institut Francais de Recherche Pour le Developpement en Cooperation, International Workshop Paris, 14-19 January "Women's Role in Food Self-Sufficiency and Food Strategies," 12 p.

> The largest portion of the female labor force in Indonesia is in the agricultural center, 9.1 million out of 16.9 million women employed in 1980. Sajogyo describes women's role in agriculture and especially rice production, as well a the effects of High Yield Varieties of paddy, the adoption of rice-hullers and other changes on female employment. Also discusses female employment in food processing and trading.

Sen, Gita. Paddy Production, Processing and Women Workers in India--The South Versus the Northeast. Prepared for "Women in Rice Farming Systems Conference," 26-30 September 1983, International Rice Research Institute, Los Banos, Philippines, 1983. (DRAFT)

> Attempts to disprove assumption that women agricultural laborers are most likely to be found in paddy cultivation, argues that women predominate in areas where fine grains are not grown. Looks at paddy production practices in two broad regions. Concludes that real relationship of women in the labor force is among irrigation, transplanting and the demand for female agricultural labor.

Sharma, Miriam. Caste, Class, and Gender: Women's Role in Agricultural Production in North India. Michigan: Michigan State University, Working Papers on Women in International Development #57, July 1984.

Major changes in the technology and economic organization of Indian agriculture have had far-reaching effects on other aspects of social life. A critical but neglected area has been the effect that the changing technology and accompanying social relations of production have had on women's role in agricultural production and on gender relations. Since the publication of Boserup's Woman's Role in Economic Development (1970), there has been a concern with critically assessing the effect of economic development and social change on female status. One of Boserup's main contributions was to begin to delineate the negative effects that colonialism and the penetration of capitalism into subsistence economies has had on women. The major objective of this paper is to undertake a review of what has been learned thus far about class and gender formation and apply it to an analysis of women in India. Preliminary work analyzing statistical trends affecting the lives of Indian women under capitalist development reveals: a declining adverse sex ratio; a declining proportion of women in industrial categories; a drastic decline of women in secondary sectors (industry, trade, and commerce); a decline in the number of female cultivators; and a lower rate of proletarianization (i.e., absorption into the work force) for women than for men and, hence, greater pauperization. This paper concretizes the general view by focusing on research carried out in a single village. It was found that female participation in production activities mirrored caste and class position. Further, this differential participation by the two main castes-cum-classes of rural women directly affects, and is intimately related to, other aspects of their lives. The paper also discusses some of the major contradictions for women's status stemming from the transformation of agrarian relations. [Michigan State University annotation)

Smale, Melinda. Women in Mauritania: The Effects of Drought and Migration on their Economic Status and Implications for Development Programs. Washington, D.C.: AID/WID Office, October 1980, 163p.

Designed to put women's social and economic status in context with whole society. Looks at women's activities in household production, cropping, herding and gathering activities as well as pressures affecting production systems. Recommends that programs need to address women as income earners and producers. Emphasizes need for agricultural training and extension for women.

Spencer, Dunstan S.C. African Women in Agricultural Development: A Case Study in Sierra Leone. OLC Paper No. 9, Overseas Liaison Committee, American Council on Education, June 1976.

*Spiro, Heather M. The Ilora Farm Settlement Scheme: Its Impact on Women and Their Households, (no date or publication) 84p.

Observational study on the impact of a farm settlement scheme on women. Thirteen farm settlements were established in Nigeria by the end of the 1960's. Planners failed to take into consideration needs of women. There was neither enough time for planning nor for implementation of social services. Women had no access to settler status making social or economic development difficult.

Spring, Anita. Priorities for Women's Programmes. Report submitted to the Ministry of Agriculture and USAID/WID, Washington, D.C., April 1983, 92p.

Spring, Anita. Profiles of Men and Women Smallholder Farmers in the Lilongwe Rural Development Project in Malawi. Final report submitted to USAID/WID, Washington, D.C., March 1984, 144p.

Spring, Anita; Smith, C.; and Kayuni, F. Women Farmers in Malawi: Their Contributions to Agriculture and Participation in Development Projects. Report Submitted to the Ministry of Agriculture and USAID/WID, Washington, D.C., April 1983, 193p.

Status of Thai Women in Two Rural Areas. Thailand: National Council of Women of Thailand, September 1977, 59p.

Action survey to collect data for possible USAID programs. Twenty village study on two provinces using three types of questionnaires with pretest study. Looked at the economic roles of men and women, social status, decision-making roles and attitudes of men and women toward their respective roles.

*Stem, John P. Children and Women in Traditional and Cash Crop Agriculture: A Preliminary Cross-Section of Economic Development in Guatemala. Rand Corporation for USAID, July 1982, 26p.

Looks at the economic activities of a sample of rural Guatemalan families in 1974. Roughly 1000 families in four rural villages and another 1000 families in a larger more modern community near Guatemala City were sampled. Presents tables on mothers working in agriculture by number of days, and involvement in traditional or cash corp production by sex. Uses regression model to prove that men work the subsistence crops while women usually weed and harvest cash crops (with children), thus cash crops provide an inducement to larger families. Analysis indicates that both women and children may be more productive in family agriculture relative to adult men than had previously been estimated. Few studies on this subject exist for this area. Particularly interesting in light of African studies on similar subjects which tend to show quite different agricultural focus by sex.

Stoler, Ann. Some Socio-Economic Aspects of Rice Harvesting in a Javanese Village. Vol. 21, No. 1, 1975, pp. 51-87.

Stoler, Ann. Class Structure and Female Autonomy on Rural Java. Columbia University, New York, 43p. (no date).

Based on field research in rural Java. Looks at the relationship between female economic activities and autonomy and social power. Sees interdependence of sexes in household economy as determinant of sexual equality on Southeast Asia.

Whiting, Beatrice. "Changing Life Styles in Kenya." Daedalus, Spring 1977, pp. 211-225.

Women in International Development. Texas A&M University, No. 2, The President's World University Series. Southwest Social Science Association, San Antonio, Texas, March 18, 1982.

Of interest: Dr. Susan Tiano, "Women and Work in North Mexico Cities: Some Considerations Relevant to Research," and Dr. Wm. Alex MacIntosh, "The Role of Women in Production of Food and Nutrition in Less Developed Countries."

*Women in Rice Farming Systems. Rome, Italy: FAO, May 1983, 22p.

Examines different aspects of women's roles in rice production, post-harvest work, marketing and the implications for expanding productivity and incomes under different cultivation conditions. Eleven case studies used, specifically looking at the impact of new technologies in rice production on women. Interesting data on the division of labor and control of land and crops in traditional and improved rice farming systems in eight countries.

Yates, Barbara. Women in Agriculture in the Eastern Caribbean. Women in Development Unit Extra-Mural Department, University of West Indies, Barbados, 1981, 9 p.

PART IV: TIME ALLOCATION

Abbott, Susan. Full-time Farmers and Week-end Wives: Change and Stress Among Rural Kikuyu Women. The University of North Carolina, Chapel Hill, PhD Thesis, (Anthropology) University of Michigan, 1974.

> A socio/anthropological look at the role of Kikuyu women. Abbott examines the work day of the major food producers (women), looking at 1) the homestead 2) patterns of economic differentiation 3) conjugal roles and decision-making. Includes chapter on decision-making and control of valuable resources. Tables include: domains attributed to males and females, interview results on male/female joint decision-making focussing on the ideal (what people thought was the ideal pattern), and the real (what actually was the pattern).

Berry, Sara S. Agrarian Crisis in Africa? A Review and an Interpretation. Prepared for Joint African Studies, Committee of Social Science Research Council of America and the American Council of Learned Societies, September 1983.

> Section E focuses on domestic organization and the relation to agricultural production. Criticizes tendencies of the literature (specifically citing Jane Guyer's 1981 review of household and lineage) to construct typologies of domestic organization. "Models which attribute trends in agricultural performance to the choices of rational households, rather than individuals obscure rather than clarify the effects of domestic organization on resource allocation." Discusses the differences between farming systems research and neo-classical economics by being inter-disciplinary, cautions that FSR is still untried, calls for quick and dirty evaluations for the sake of savings both of time and resources.

Birdsall, Nancy, and McGreevey, William Paul. Women, Poverty and Development. (No citation available)

> Uses analytic techniques to examine systematically women's household and non-household activities and the way these activities intersect with and are affected by the presence and activities of other household members.

*Chernickovsky, Dov, ed. The Household Economy of Rural Botswana: An African Case. World Bank, December 1981. DRAFT

> Study based on Botswana's Rural Income Distribution Survey. Portrays economic life in rural Botswana and South Africa; the allocation of family resources, agricultural production, wage employment, schooling, fertility--all studies from perspective of household economy. Sampled 1765 households, 1115 households actually interviewed. Information based on time data "scope and detail of which are unprecedented in African studies."

*Guyer, Jane I. Dynamic Approaches to Domestic Budgeting. Cases and Methods from Africa. Prepared for "Women and Income Control in the Third World Conference," New York, 1982 36p. (Limited Distribution.)

> Guyer traces the history of budget analyses in Africa. Women remain invisible because much of the older data does not document their economic roles. Women's activities and expenditure patterns are relatively unexplored areas, their study would show seasonability of income, expenditures, responsibilities, domestic situation, phases in the developmental cycle and fluctuations in the rural economy. Encourages systematic documentation of changing patterns of interactions at the micro level and their relationship to political and economic change at the macro level.

Hardt, Terry Lee. Decision Making Roles in Rural Households and the Adoption and Diffusion of an Improved Maize Variety in the Northern Shaba Province, Zaire. Ph.D. Thesis, Iowa State, 1981.

Hayami, Yujiro; Moya, Piedad F.; and Bumbo, Luisa M. "Labor Utilization in Laguna Rice Village," The Philippine Economic Journal. #36, Vol. XVII, Nos. 1 and 2, 1978, pp. 244 - 258.

Jain, Devaki, and Chand, Malini. Report on a Time Allocation Study--Its Methodological Implications. New Delhi: Institute of Social Studies Trust, 1982, 57 pages.

*Jones, Christine. The Mobilization of Women's Labor for Cash Crop Production: A Game Theoretic Approach. Prepared for "Women in Rice Farming Conference," 26-30 September 1983, International Rice Research Institute, Los Banos, Philippines, 1983. (Draft)

> Premise of paper is that terms under which goods, income and services are exchanged among household members can be better represented by a mixed-interest cooperative game model which assumes that household members benefit from an exchange of goods and services that have different socially structured preferences regarding the intra household terms of exchange. The conflict is resolved by a bargaining rule. Also looks at a heuristic bargaining model to explain how women's labor is mobilized by their husbands for cash crop production in Africa.

McSweeney, Brenda Gael. An Approach to Collecting and Examining Data on Rural Women's Time Use and Some Tentative Findings: The Case of Upper Volta. Working Paper for Seminar on Rural Women and the Sexual Division of Labor, The Population Council, New York, March 30, 1979, 36p.

> To expedite the translation of empirical data into "balanced development" the Economic Commission for Africa's Training and Research Center for Women has proposed a "model" for measuring and monitoring women's contributions and needs by means of a set of socio-economic indicators of women's participation and access to the means and rewards of development. One component of the TRCW model was to look at impact of the Women's Education Project in Upper Volta, using a time use analysis. McSweeney details the overview and intensive survey techniques used in order to obtain an accurate

reading. Advocates these techniques for gathering country by country information on women in order to better develop appropriate programs.

Mueller, Eva. "The Value and Allocation of Time in Rural Botswana." Journal of Development Economics. 15(1984), pp. 329-360.

Using Rural Income Distributions Survey conducted by government of Botswana in 1975 Mueller looks at the supply of labor in rural areas, particularly the labor of women.

*Quizon, Elizabeth King. "Time Allocation and Home Production in Rural Philippine Households." The Philippine Economic Journal #36, v. XVII nos. 1&2, 1978.

One of the first time allocation studies to look at the role of women and men, Quizon views the household as an economic unit which maximizes welfare through optimal use of total resources-consumption as will as production oriented. Presents tables on time allocation of fathers and mothers in Laguna households by occupational group.

A Review of African Political Economy. Women in Development Issue No. 27:28, 1984.

Includes the following: "Women and Land Resettlement in Zimbabwe" by Susie Jacobs, "Women and Development in N. Western Zambia: From Producer to Housewife" by Kate Crehan, and "Women's Groups and Women's Subordination: An Analysis of Policies Towards Rural Women in Kenya" by Rayan Feldman.

*Spiro, Heather. The Fifth World: Women's Rural Activities and Time Budgets in Nigeria. Occasional Paper No. 19, Dept. Geography, Queen Mary College, University of London, June 1981, 59 p.

Time budget analysis shows that all Yoruba women spend about 25 percent of their time on agriculture although officially only 20-36 percent of women farm while. Survey of decision-making responsibility showed that women often made all major decisions regarding farming operations. Given these interesting findings, Spiro maintains that Nigeria has ignored women and without women there will be no comprehensive development in Nigeria. Policy implications of time use studies are enormous, but Spiro fails to emphasize these.

Time Allocation Survey, A Tool for Anthropologists, Economists and Nutritionists. Rome, Italy: Food Policy and Nutrition Division, FAO, November 1983, 36p.

The paper presents the results of three time allocation surveys taken in Nepal, Ivory Coast and Central African Republic. The findings underscore the major role which women play in food related economic activities. Makes argument that time allocation surveys in developmental planning make a difference.

White, Benjamin; Wigna, Winati; and Suryanata, Krisnawati. Comparison of the Results of Time Allocation Research, Using Two Different Recall Periods. Prepared for the AES-IRRI Joint Village Study Review, Los Banos, Philippines, 1980.

A look at alternative methodologies in labor utilization studies.

White, Benjamin, and Hastuti, Endang Lastari. Different and Unequal: Male and Female Influence in Household and Community Affairs in Two West Javanese Villages. Prepared by AES-IRRI Joint Village Studies Review, project on "Rural Household Economics and the Role of Women," Los Banos, Philippines, 1980, 62p.

PART V: PROJECT EVALUATION

Bond, C.A. Women's Involvement in the Integrated Farming Pilot Project (IFPP). Botswana: Department of Agricultural Services, Ministry of Agriculture, Feb. 1977.

*Carloni, Alice. Integrating Women in Agricultural Projects: Case Studies of Ten FAO Assisted Field Projects. Rome, Italy: FAO, 1983, 103 pp.

Presents case studies of two FAO field projects carried out in 1982 by Home Economics and Social Programmes Service of FAO. Purpose was: 1) to assess extent to which FAO agricultural projects in various fields have taken rural women into account, 2) to identify consequences of overlooking women--not just for women--but to the project as a whole 3) to suggest design alternatives which would strengthen a project by incorporating women.

Looked specifically at: 1) prevention of food loss, 2) poultry keeping, 3) livestock and irrigation in Asia, Africa (East and West), Near East and the Caribbean. In looking at the project Carloni focussed on: 1) project strategy, 2) women's role in local farming systems and post-harvest activities, 3) women's place in the project, 4) flaws in project strategy, 5) alternative project designs. Carloni quickly and simply defuses what she says are the 10 most common fallacies about women in agriculture: 1) women are relevant to FAO research only in their household and economic roles, 2) integration of women into agriculture will mean more work for extension agents, 3) emphasis on women's role in production undermines the family, 4) why there is a need to focus on women--and not children, youth and aged, 5) assistance should be directed to farm families as a whole, 6) concern with women's control of income is a Western influence, 7) benefits to household trickle down to women automatically, 8) I'm an agricultural expert and women are not my job, 9) integration of women is a separate concern for agricultural projects unrelated to project design, and 10) integration of women will mean more work for technical division and less time for the solution of more important problems.

After analyzing these myths Carloni recommends integrating women's role research into each project and highlights the pitfalls to be avoided. Notes that the women in development experts have often been isolated from the project, compartmentalized and thereby neutralized. Concludes that large scale projects with exclusive women's components have been most successful.

*Cloud, Kathleen. Women's Productivity in Agricultural Systems: Considerations for Project Design. Case Study and Training Project funded by USAID, 1983-1984, 38 pp.

Designed to help development professionals think about the work women do in agricultural systems, how projects can help women improve productivity for their own benefit and that of larger

society. Argues the case for giving greater focus to women not only for the sake of equity but for efficiency and self-interest--it pays to deliver resources to women in agricultural systems. Cites Ruth Dixon as providing the best macro data on women in agriculture in her 1982 study of female percentages of agricultural labor force in 82 countries.

*Gladwin, Christina, and Staudt, Kathleen. Reaffirming the Agricultural Role of African Women in Household Economies and Rural Development. Washington, D.C.: AID/WID, October 1983.

Authors quickly review the case for focusing on women in agriculture, asserting that inputs going only to household head (male) will not improve yields of food crops or help alleviate food crisis. The latter can only be done by understanding the values, perception and attitudes of women farmers. Study goes on to critique USAID/Women in Development programs, showing that women are relegated to marginal program participation in agency's agricultural an international training sectors. Includes budget information of AID/WID projects and shows that geographic bureau heads devote .3 - 5.5% of their budgets to WID activities and this money to traditional safe areas such as health, nutrition, family planning and not income generation.

Gladwin, Christina. "Recommendations and Report to the Rockefeller Foundation Based on the Association of Faculties of Agriculture in Africa." Home Economics in Rural Development in Africa, 17-21 October 1983, 23 pp.

Analysis of development projects has shown that they still fail to: 1) identify the problems and constraints of women who provide 50 to 70 percent of the work in food production; 2) realize that women food producers in Africa are semi-autonomous decision-makers with relatively more economic independence than western women; 3) acknowledge their role as producers and reproducers; 4) take into account the traditional allocation of labor and income. Concludes with a series of recommendations on how best to reach women farmers through home economists retrained in agriculture and integrated into the farming systems terms.

Lele, Uma. Postscript to the Third Printing: A Revisit to African Rural Development. 1979.

An impressionist view of the World Bank's rural development programs in Africa. Argues that single packages are not relevant in Africa--constraints such as lack of profitable technology, ineffective extension, inadequate outputs may be general but ill health and poor incentives may be location specific. There is need for a general package that can be adjusted. Believes that overall Bank programs have improved since 1974 with a greater emphasis on manpower training and understanding for the broad range of factors that might effect development performances.

*McPhee, Sarah. The Checklist Project: Project Evaluation Techniques and Women's Contribution. Consultant to SIDA, Stockholm, November 1982.

Provides methodology for data (information) gathering and for project evaluation specifically for rural projects. Sets out five checklist principles: 1) Sexual division of labor: who will perform the work introduced by project? 2) Female labor productivity: how can access to technology and leisure decrease women's workload while raising their potential for contribution? 3) Consumption patterns: how do economic incentives offered by the project match consumption patterns in the family, especially among women in the family? 4) Decision-making in the household, production unit: who disposes income and for what? 5) Economic and political participation: do women who perform project work or profit from project's benefits participate in designing and/or directing the project?

McPhee presents a series of complete checklists for all aspects of project evaluation as well as the checklists used by other international agencies.

Staudt, Kathleen. Tracing Sex Differentiation in Donor Agricultural Programs. Prepared for the American Political Science Association Annual Meeting, Washington D.C., August 30-September 3, 1979.

Whalen, Irene T. International Livestock Centre for Africa's Ethiopian Highland Programme: Problems and Perspectives in Expanding Participation of Women. Prepared for Workshop on "Women in Agriculture in West Africa," May 7-9, 1984, Ibadan, Nigeria, 24 pp.

PART VI: SERVICES, EXTENSION, TRAINING, CREDIT, COOPERATIVES

Barber, Elinor. Agricultural Extension Education and the Emergence of the "Development Woman". Ford Foundation, May 1980.

Short anecdotal article on the need for agricultural extension for women, the need to treat women as experienced mature adults and the need for data on the needs of the agricultural woman.

*Berger, Marguerite; DeLancey, Virginia; and Mellencamp, Amy. Bridging the Gender Gap in Agricultural Extension. Washington, D.C.: International Center for Research on Women, for the Office of Women in Development, USAID, September 1984, 74 pp.

Paper attempts to provide a framework for the thorough analysis of current attempts to develop cost-effective mechanisms for reaching women farmers. Although women in developing countries are primary actors in agricultural production they have been virtually ignored by agricultural extension agents. The few training programs available to them often focus on home economics and are irrelevant to their role in subsistence agriculture. Women who are farm managers are less likely to have contact with agricultural extension services that women partners in joint (male-female) managed farms. Even in joint farms women rarely receive agricultural information from their husbands or other male household members, particularly when work on specific crops or tasks are divided by sex. Study looks at the four types of agricultural extension organizations most likely to be found in the developing world and analyzes their potential for assisting women. Looks at factors such as mechanisms for delivery of services as well as characteristics of female farms that might limit their participation in agricultural extension programs. Tackles questions of women-specific programs vs. integrated extension programs, and women extensionists for women or women extensionists as part of the mainstream of extension. Presents cogent argument that the effectiveness of extension agents, whatever gender, will be dependent of the parameters of the existing framework, etc. that define it. It is this framework that must be adapted to reach women.

Bettles, F.M. Women's Access to Agricultural Extension Services in Botswana. Prepared for Ford Foundation Workshop on "Women in Agricultural Production in Eastern and Southern Africa," Nairobi, April 9-11, 1980.

Fortmann, Louise. "The Need for an Expanded Role for Women in Agricultural Extension in Tanzania." Eastern African Journal of Rural Development (xerox copy) 11 pp.

Short essay on the need for agricultural training for women in Tanzania. "Agricultural vocational training, which is non-existent or very inadequate, is given only to men. It should be oriented towards women, who accomplish the majority of actual tasks." (Rene Dumont 1966) Fortmann briefly presents statistics on training in

Tanzania and proportion of women reached by the training. Includes policy recommendations on how to increase level of extension training for women.

Jiggins, Janice. The Need for Improved Agricultural Extension Services for Women Engaged in Agriculture. Prepared for "Expert Consultation on Women in Food Production," FAO, Rome, December 1983, 13 pp.

In recent reports it has been shown that women make up an average of 42% of the agricultural labor force in 82 developing nations. Other information suggest that due to migration this figure may be rising. The problem is that rural women are not being adequately reached by the agricultural extension services in many of the developing countries and they appear to have differential access to information and assistance that is generally extended to their male counterparts. Essay briefly reviews the issues regarding women and extension services and concludes with seven issues to be discussed by policy planners. Issues include: 1) How male and female agricultural agents can reach small-scale farmers, many of whom are women; 2) Why are there so few female agricultural agents?; 3) How can FAO be effective in bringing about the necessary changes to improve extension services in developing countries to a point where they reach subsistence farmers (women and men) with timely and relevant information?; 4) What can be done to improve the quality and upgrade the level of enthusiasm of extension agents working with small-scale farmers?; 5) Is it necessary to review and change the methods used by extension agents to communicate their message to local farmers?; 6) Should all home economics extension agents have agricultural training included in their pre-service and in-service training programmes?; and 7) Is in-service education an immediate answer while long-term training programmes curriculum changes and selection procedures are prepared?

Opeke, Dr. R. Ola. Women in Agricultural Production Cooperatives: Some Lessons from Nigeria. Workshop on "Agricultural and Rural Development in Africa," June 1-5, 1981, Lome, Togo, 20 pp.

Preliminary assessment of status and special contributions of women in agricultural cooperatives in OYO state in Nigeria. Assesses institutional arrangements and constraints that affect women's participation in farmer's multipurpose Cooperative Societies. Gives data on women in male cooperatives as compared to all female groups. Found that women in all female group knew more about crops, acreage etc. than women who were part of a male cooperative. Argues the case for female extension agents for women as well as women group farming.

Smithells, Janice E. Agricultural Extension Work Among Rural Women: An Assessment of Staff Training Needs in Selected Developing Countries. University of Reading Agricultural Extension and Rural Development Centre, March 1972, 32p.

Early piece on the need for inclusion of women in traditional organization of rural development. Presents history of extension services for women in late 1960s and argues for training of female

field personnel. Although the view is dated this is an interesting background piece on extension services for women.

*Staudt, Kathleen. Agricultural Policy Implementation: A Case study in Western Kenya. New York: The Population Council, May, 1984, 76 pp. (Draft)

Staudt compares the access of female managed farms to agricultural services to that of jointly managed farms to a) determine whether there are inequities, and b) evaluate consequences of those inequities on female managers' farm performance and by extension the overall agricultural performance in Kenya. Posits that by pursuing a range of low-cost administrative programs which recognize and build on indigenous capabilities, Kenya has the potential to increase productivity and ameliorate domestic food crisis. Presents data from field research in Kenya from 1974-1975. Includes survey information on 212 households. Findings included: female managed farms always received fewer services than jointly managed farms and gaps increased as services became more valuable. Women had less access to extension visits and demonstration plots as well as less access to training courses. In findings similar to those of Peter Moock in an earlier study, a controlled comparison revealed that under conditions of unequal male-oriented agricultural services female managers experienced a decline in relative farm performance compared to men and a decline in absolute performance compared to female managers in other areas. In areas of lower land scarcity and access to minimal services women diversified and adopted innovations faster than farms with a man present. When access to education and extension held constant female managers increased production faster than men. Staudt uses these findings to support her argument that agricultural development in Kenya is dependent on transforming agricultural services to reach women.

*Staudt, Kathleen A. Inequities of the Delivery of Services to a Female Farm Clientele: Some Implications for Policy. Discussion Paper No. 247, Nairobi: Institute for Development Studies, University of Nairobi, January 1977.

PART VII: LAND REFORM AND RESETTLEMENT SCHEMES

Deere, Carmen. Rural Women's Experience in the Latin American Agrarian Reforms. O.R.S.T.O.M., Institut Francais de Recherche Pour le Developpement en Cooperation, International Workshop Paris, 14-19 January, "Women's Role in Food Self-Sufficiency and Food Strategies," 16 p.

> Most Latin American agrarian reforms have directly benefited only men. Deere presents a comparative analysis of thirteen Latin American agrarian reforms that demonstrate that benefits to women occur only when incorporation of rural women is a stated objective of state policy. Included is an interesting bibliography of women in agriculture in Latin America especially as it relates to land reform.

Isaacman, Barbara, and Stephen, June. Mozambique: Women, the Law and Agrarian Reform. Addis Ababa, Ethiopia: United Nations, 1980, 148p.

> A look at post-revolution Mozambique and the effects of agrarian reform on women.

Jacobs, Susie. Women and Land Resettlement in Zimbabwe, A Review of African Political Economy. Women in Development Issue, Double Issue No. 27:28, 1984.

> Anecdotal argument that current resettlement models discriminate against women. Socialist strategies of the new state are not confronting gender hierarchies. Dissatisfaction is growing among women that they are not being recognized in resettlement schemes after having fought for Zimbabwe. Women have few rights to land. Capitalism may have reinforced gender division but resettlement program under socialism continues to marginalize them.

MacCormack, Carol P. "Control of Land, Labor and Capital." Women and Work in Africa. Boulder, Colorado: Westview Press, 1982, pp. 35-53.

> Case study that looks at the relatively high status of the Sherbro women of Sierra Leone.

Okeyo, Achola Pala. "The Joluo Equation," FAO Review on Agriculture and Development. Vol.13, No.3, May-June 1980, Rome, pp. 37-42.

> Land reform in the mid-seventies changed the legal transfer of land from communal or lineage to the individual. Okeyo interviews 135 women cultivators in an effort to access the effect on the status and rights of women.

Onger-Hosgor, Tulin. The Effects on Women of Land Tenure Changes and Agrarian Reform. "Expert Consultation on Women in Food Production," Rome, Italy, 7-14 December 1983, FAO, 23 pp.

The position of women before and after agrarian reforms is examined, with respect to legal structures, social and institutional changes, technology and culture. It is argued that unless sympathetic and unambiguous efforts to safeguard the interests of women are made when agrarian reforms are drafted and implemented, women can often be harmed rather than helped when the reforms are carried out.

PART VIII: IMPACT OF DEVELOPMENT

Abdullah, Mrs. T.A., and Zeidenstein, Dr. Sondra. Socio-Economic Implications of HYV Rice Production on Rural Women of Bangladesh. Seminar paper, 89 pp. (No date or publication)

> Authors observe that the economic and social gains expected from the introduction of HYV rice in Bangladesh are partially offset by the adverse effect of such modernization on women--thus creating larger welfare gaps. Little data is given to back up the hypothesis. Meant primarily as a think piece to spur on new research on the impact of technological interventions on women.

*Agarwal, Bina. Rural Women and High Yielding Variety Rice Technology in India. Prepared for conference on "Women in Rice Farming Systems," 26-30 September 1983, International Rice Research Institute, Los Banos, Laguna, Philippines, 57 pp. (Draft)

> Paper questions the assumption that the household is a unit of converging interests, wherein the benefits and burdens of technological change will be shared equally between all members. By focusing on women Agarwal recognizes that male and female members of a given class may be affected differently by technology change. Little available literature exists on the implications of technology change for women in terms of their field work, their non-field work and their access to income and consumption items. This paper attempts to make a quantitative assessment of the effects of HYV rice technology on women's involvement in field work based on data from farms of Andhra Pradesh and Tamil Nadu and Orissa (principle rice growing states in India). Labor used with HYV and traditional rice varieties is disaggregated by gender and by type of labor (family, permanent, casual) and by farm size group. Although the data shows and increase in the demand for labor with the introduction of HYV rice varieties it also noted that the increased demand for female casual labor may not benefit the women of the poorest households, if firstly there is no increase in daily real wages (there was not) and secondly there are intra-household inequalities in access to income and consumption items. Concludes that there remain many significant gaps in the data on the impact of new technologies on women and that filling these gaps is essential when considering the significance of women's work and contribution to the family's survival.

Ashby, Jacqueline. Agricultural Technology and Social Structure: New Perspectives in Sociological Models of Diffusion--Some Evidence from Nepal. March 1979, 34 pp. (No citation)

> Looks at the culturally defined motivations for accepting innovations. Concerned with organization of social resources which might influence the farmer's decision. Ashby reviews the classical diffusion model and finds that adoption of new technologies seems limited less by traditional barriers of communication than by

cultural constraints. Presents a case study in Nepal, using a random sample analysis of 332 households.

Ashby, Jacqueline A. Participation of Small Farmers in Technology Assessment. International Fertilizer Development Center, Alabama, Report of IFDCC with CIAT and ICA, June 1984, 83 pp.

Concerned with the development of models for agricultural research which involve the participation of farmers in technology assessment. Participation will provide feedback on potential acceptability of technology and will take into account the need to factor in location specificity, diversity of needs and goals as well as resources of the small farmer. Study based in Colombia, South America as part of an on-farm testing of fertilizer technology in the IFDC/CIAT Phosphorus project. Three types of participation were tested: 1) nominal, 2) consultative, and 3) decision-making participation. Although there is no data on women discussion has great implications for the adoption of new technologies in the developing world.

Balcet, Jean-Claude, and Chandler, Wilfred. Farm Technology Adoption in Northern Nigeria, Vol 1. Cornell University and the World Bank, February 1982.

Result of a two year study (1976-1978) with the objective of explaining farmer behavior regarding the adoption of new technologies in three World Bank agricultural development projects in Northern Nigeria. Proceeded with the hypothesis that to be adopted technology must be superior in terms of farmers' goals and preferences to traditional methods. Farmers are primarily risk averters. As mixed cropping is the central feature of traditional systems one must look at new technologies in reference to mixed cropping. Authors collected extensive data on farmer objectives, cropping systems, and behavioral factors of technology adoption. Interestingly, there is no discussion of intra-household relationships and no discussion of the role of women other than to note that Hausa women observing purdah contribute little to farming and that Maguzawa Hausa women who are animist participate in all agricultural areas. By excluding these relevant areas the study of technology adoption may be invalid.

*Burfisher, Mary, and Horenstein, Nadine. Division of Labor and Income of the Farm: A Framework for Analyzing Differential Impacts of Development Projects on Women. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, Africa and Middle East Branch, International Economic Division, January 1982, 94p.

Purpose was to create a conceptual framework for studying sex role differences in the farm household of one ethnic group and for analyzing the dynamics of farmer/project interactions. Recommends that project design incorporate a more explicit recognition of role differences within households so that interventions can target both men and women more effectively.

*Due, Jean M.; Mudenda, Timothy; and Miller, Patricia. How Do Rural Women Perceive Development? A Case Study on Zambia. Michigan: Michigan State University, Working Papers on Women in International Development, #63, August 1984, 19 pp.

In this study 112 farm and 30 market women were interviewed almost 20 years after Zambia gained independence to ascertain whether or not these women perceived development occurring, whether they had influenced its path, and what kinds of development would most assist them. Women were also asked what amount of time they contributed to farming (or their market activities) and to household tasks. Results showed that farm women contributed 53% of total agricultural labor on their farms and 82% of the household labor. Fifty-one percent of the farm women and 57% of the market women believed that development had occurred in the areas where they lived and, of this group, 88% believed they had benefited from this development. Only one-third of the farm women and one-half of the market women, however believed that they had "influenced" the direction of development. When asked what kinds of development would most assist them, the farm women's responses were farm improvements, credit, clinics, wells and transport. Of the 53 responses describing farm improvements, 20 wanted labor saving devices (oxen, ploughs, tractors for hire), 14 wanted higher farm prices, 9 lower input prices, and 6 more cattle. The market women wanted improved markets, cooperatives for women, and clinics. [Michigan State University Abstract]

*Kelkar, Govind. The Impact of the Green Revolution on Women's Work Participation and Sex Roles. Prepared for the International Labour Office, Tripartite Asian Regional Seminar, "Rural Development and Women," Mahabaleshwar, India, 6-11 April 1981.

Study is an attempt to determine the complexity of interrelationships between technological change in agriculture and the process of underdevelopment of women in rural India. Author made study of related source material and conducted formal interviews as well as observational interviews in 58 households over six weeks in three villages in Uttar Pradesh (23% representation of total households in the three villages). Also included individual case studies which are anecdotal and descriptive. Posits that the unwitting effect of the Green Revolution has been to intensify gaps between haves and have nots. Women are excluded from new technology and their economic exploitation. Women have little access to rural development programs. They have no credit, no land, no guarantors. Quotes Vina Mazumdar's analysis of women's underdevelopment. "The principle obstacle to women's development comes from male dominated planning and development agencies at local, regional and national levels...political economic function of 'house wifazation' of women's roles reinforces dependency on men and provides impetus for underestimation of women's work and the contribution to society." Home economic-housewifey programs have failed because they are irrelevant to the needs of women in subsistence agriculture.

Nash, June. Implications of Technological Change for Household Level and Rural Development. Michigan: Michigan State University, Working Papers of Women in International Development, #37, October 1983, 29 pp.

When the contribution women make in production is not taken into account by development agencies, the introduction of technological change and large-scale projects may result in the destruction of the domestic economy and the impoverishment of families. Increasing rates of infant mortality are evidence of the polarization of wealth and the limited access to the means of production women and children are permitted (in developing countries) with the penetration of capitalism. As the ultimate unit of production in resisting the encroachment of capitalism, the domestic unit has subsidized the costs of capitalist production. Theories of the domestic mode of production are discussed in relation to development planning. Models focusing on economic factors are seen as too limited to assess the outcome of development planning because of the cultural imperatives motivating behavior. Nine cases of development grouped according to type of innovation, e.g., the adoption of cash crops and mechanization; large-scale development projects such as dams, craft and industrial production; and forced migration, are discussed in relation to the following variables: 1) changes in the composition of the household, 2) changes in the division of labor within the household, and 3) migration of members of the family. The author concludes the article with a series of propositions about the relationship between these variables and the success of the projects measured in terms of their contribution to human welfare. [Michigan State University Abstract]

*Palmer, Ingrid. The Nemow Case: Case Studies of the Impact of Large Scale Development Projects on Women, A Series for Planners. New York: The Population Council, Study No. 1, May 1984 (first issued in 1979 as #7) 85 pp.

This is a prototypical analysis of why development planners should be concerned about women and how concern can be incorporated into project design. Palmer draws data from a variety of field experiences and consolidates findings into a single hypothetical case. Her objective was to show how women's roles are intrinsic to concern with development and to show that it is not unusually difficult to see how projects affect women. Nemow project's goal was to increase yields of rice and fish and to create an increased marketable surplus. Palmer analyses the projects and then proceeds to give alternatives to achieving project goals by choosing an alternative allocation of productive resources. Assumes that land allocation is central and that all else flows from this. Interesting and beneficial analysis for the development planner.

Spring, Anita, and Hansen, Art. "Women's Agricultural Work in Rural Zambia: From Valuation to Subordination." Presented at Africa Studies Association Annual Meeting, Los Angeles, October 31, 1979.

A historical review of changes that have occured since 1930 in northwest Zambia, Zambezi District. Concludes that women have had their agricultural burdens increased due to a cessation of shifting cultivation. Policy planners have further depressed women's earning

ability by encouraging the division of male/female labor into cash crops and subsistence crops respectively thus isolating women from areas that might enhance their incomes. This type of false planning has further perpetuated underdevelopment in the Zambian agricultural sector.

Stanbury, Pamela. Women and Water: Effects of Irrigation Development in a North Indian Village. Michigan: Michigan State University, Working Papers on Women in International Development, #50, February 1984, 29 pp.

Focuses on a North Indian village irrigated since 1954. Analyses impact on women's participation in on-farm labor, both paid and unpaid and its impact on women's domestic activities particularly food production and fuel procurement. Found that there are varying benefits to women of different castes. Concludes that irrigation may have been a boon to the upper castes but may have increased gap of opportunity between landed and landless women.

BIBLIOGRAPHY

Annotated Bibliography No. 1, "Women in Development: A Selected Annotated Bibliographic and Resource Guide." Michigan: Michigan State University, Non-formal Education Information Centre, Institute for International Studies in Education, 1980.

Annotated Country Bibliography. Addis Ababa: Economic Commission for Africa, ECA/ATRCW.

Bibliography, Women in Rice Farming in Asia. (In-House Rockefeller).

Blete, Tone and Ragnhild, Lund. Gender relation: The Missing Link in the Development Puzzle: A Selected and Annotated Bibliographic Guide to Theoretical Efforts and South Asian Experiences. Christian Michelsen Institute in Bergen, 1985. (Draft)

Buvinic, Mayra, with Cheri S. Adams, Gabrielle S. Edgcomb and Maritta Koch-Wesser. 1976 Women in World Development: An Annotated Bibliography. Washington, D.C.: Overseas Development Council, 1976.

Carr, Marilyn. Economically Appropriate Technologies for Developing Countries: An Annotated Bibliography. London: Intermediate Technology Publications, 1976.

Caughman, Susan. Women in Development in Mali: An Annotated Bibliography. United Nations #6, 1982.

Fortmann, Louise. Tillers of the Soil and Keepers of the Hearth: A Bibliographic Guide to Women in Rural Development. Bibliography Series No. 2, Ithaca, New York: Cornell University, Rural Development Committee, Center for International Studies, 1979.

Lewis, Martha Wells. Women and Food: An Annotated Bibliography on Family Food Production, Preservation and Improved Nutrition. Washington, D.C.: Office of Women in Development, U.S. Agency for International Development, AID/OTR-147-78-52.

Mascarenhas, Ophelia, and Mdilinyi, Marjorie. Women in Tanzania, An Analytic Bibliography. Uppsala, Sweden: Scandinavian Institute of African Studies, (no date).

McCarthy, Florence E., Saleh Dabbah and Roushan Akhter. Bibliography and Selected References Regarding Rural Women in Bangladesh Women's Section, Planning and Development Division. Dacca, Bangladesh: Ministry of Agriculture and Forests, 1978.

Morris, R. The Role of Women in Technicological Agricultural Extension: A Selected Annotated Bibliography Covering Extension Activities of Women in All Continents. London: International Extension College, May 1977.

Ransinghe, W. A Bibliography of Socio-Economic Studies in the Agrarian Sector of Sri Lanka. Colombo: Agrarian Research and Training Institute.

Rihani, May. Development as if Women Mattered, An Annotated Bibliography with a Third World Focus. Occasional Paper No. 10, Washington, D.C.: Overseas Development Council, 1978.

Saulniers, Suzanne Smith and Cathy A. Rakowski. Women in the Development Process: A Select Bibliography on Women in Sub-Saharan Africa and Latin America. A Special Publication of the Institute of Latin American Studies, The University of Texas at Austin (non-annotated, women and the law, specialized training, women and the economy--informal and formal, women and development).

Women in Development: A Bibliography. Training and Methods Series, No. 29, Madison, Wisconsin: University of Wisconsin, Madison, 1979, (Non Annotated By Region).

Women in Development in Zimbabwe: An Annotated Bibliography. United Nations, Bibliography Series No. 9, African Training and Research Centre for Women of the Economic Commission for Africa.

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